

February 20, 2003

Certified Mail # 9059 2375

Ms. Jean Ziga
Environmental Coordinator
Hammond Group, Inc. (HGI)
1414 Field Street – P.O. Box 6408
Bldg. B
Hammond, Indiana 46325-6408

Re: **AAF089-15660**
Sixteenth Administrative Amendment to
FESOP 089-5200-00219

Dear Ms. Ziga:

Hammond Group, Inc. was issued a permit on December 12, 1996 for an Inorganic Chemicals and Pigments Manufacturing Plant. A letter requesting an administrative amendment to their FESOP (Modification to Stack 14-S-15 – Construction of a Replacement Expanders Operation) was received on May 7, 2002. Also a letter requesting another administrative amendment (Modification to Stack 1-S-52 – Addition of Unit 52-21 and removal of Unit 52-18) was received on November 25, 2002. Pursuant to the provisions of 326 IAC 2-8-10(a)(14) the permit is hereby administratively amended as follows:

HGI requests approval to replace the Expander Operation (Stack 14-S-15). This operation was destroyed in a fire on August 8, 2001. Approvals for interim operations have been obtained since then and HGI is now requesting approval to construct the final, permanent operation to replace the previous. HGI is submitting this application in accordance with 326 IAC 2-8-11.1(b) which allows for the replacement of an emission unit. The replacement will result in a potential to emit for each regulated pollutant that is less than the potential to emit of the unit replaced and it will return the operation to normal after an upset. Construction for this operation was estimated to begin on June 1, 2002, but due to other local issues involving this project (Zoning and Building) the issuance of this administrative amendment was put on hold. A Board of Zoning Appeals was held on January 29, 2003, at which time the Hammond Zoning Department granted approval for a Conditional Use Permit. HGI then obtained their Building Permit on January 31, 2003. Construction of this operation may begin and the administrative amendment can now be issued.

In accordance with 326 IAC 2-8-10(a)(14), this construction qualifies as an administrative amendment because it adds emissions units of the same type that are already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing emissions units. A Ball Mill System is currently permitted for the interim Expander Operation and was previously operated and permitted before the fire. These systems will be controlled by dust collectors similar to units currently permitted and operated. Permit terms and conditions for these units will be similar to existing permitted units and HGI will accept the previous emissions limits for stack 14-S-15 for the three systems combined. Emission calculations show that the combined emissions from all units from the three systems will be well within these emissions limits. This modification will not result in a net emissions increase.

HGI will maintain its limitations and compliance monitoring conditions for Stack 14-S-15 as stipulated in Section D.10 of the FESOP. HGI will maintain compliance with the listed emissions limits for PM10 and PM. The PMP will be updated to include all of the new dust collectors. All dust collectors will be operated at all times when its associated facility is in operation and the total static pressure drop across each unit will be maintained within 0.1 – 20 inches of water.

HGI also requests approval to modify its Stack ID 1-S-52 with the addition of Unit 52-21 and the elimination of Unit 52-18 from the FESOP since it is no longer in operation.

In accordance with 326 IAC 2-8-10(a)(14), this modification qualifies as an administrative amendment because the new process will be similar in operation to existing units currently permitted and operated by HGI. In addition, this unit will be tied to Stack 1-S-52, for which existing permit terms and conditions will be maintained. Calculations show that potential emissions, after controls, will remain well below the limits for stack 1-S-52. HGI agrees to accept the existing allowable emissions limits for stack 1-S-52 for PM, PM10, and Pb in accordance with its FESOP.

Proposed Changes:

The following changes were agreed to and made as the Sixteenth Administrative Amendment for this source (~~strikeout~~ added to show what was deleted and **bold** added to show what was added):

FESOP

- On page 3 of 78, Table of Contents has been changed to be as follows:

TABLE OF CONTENTS (cont.)		
Section	Description	Page No(s).
C	SOURCE OPERATION CONDITIONS	24
	FACILITY OPERATION CONDITIONS	
D.1	Stack ID 1-S-52	30
D.2	Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26	34
D.3	Stack ID 16-s-56	37
D.4	Stack ID 4-S-35	41
D.5	Stack ID 1-S-27	44
D.6	Stack ID 6-S-33	47
D.7	Stack ID 4B-S-34	50
D.8	Stack ID 6-S-47	53
D.9	Stack ID V-1	56
D.10	Various Stack IDs assoc. w/Expander Operation (previously Stack ID 14-S-15V)	59
D.11	Stack ID 18-S-49 and 18-S-24	61
D.12	Stack ID 20-S-37 and 20-S-42	62
D.13	Stack ID 20-S-39 and 20-S-44	64
D.14	Stack ID 20-S-48	66
D.15	Stack ID 14-S-45	68
D.16	Stack ID 17-S-25 and 17-S-40	70
D.17	Stack ID 20-S-36 and 20-S-41	72
D.18	Stack ID 20-S-38 and 20-S-43	74

	FORMS	
	Certification Form	76
	Deviation Forms (2)	77, 78
	Total Number of Permit Pages	78
	Total Number of Forms	3
	Technical Support Document	44-45
	Emissions Calculations	83 94

2. On page 5 of 78, A.2 Emission Units and Pollution Control Summary, Stack ID 1-S-52 has been changed as follows:

~~7.~~ Unit ID ~~52-18~~

~~(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).~~

~~This unit is not controlled by the Main Control System. It has its own baghouse & HEPA system (52-6 F & H) which exhausts through stack 1 S-52.~~

~~87.~~ Unit ID 52-20

~~(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).~~

8. Unit ID 52-21

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

3. On page 8 of 78, A.2 Emission Units and Pollution Control Summary, Stack ID 14-S-15V has been changed as follows:

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15V)

1. Unit IDs 15-1, ~~and 15-2,~~ and **15-3**

Stack IDs associated with each unit are as follows:

a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, & R-1003

b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, & T-2000

c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, & T-3000

(Shared by all three units): R-1001, R-1004, & R-1005

~~(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).~~

The emissions from Unit IDs 15-1, 15-2, and 15-3 are controlled by a baghouse and HEPA system dust collectors.

~~The emissions from Unit ID 15-2 are controlled by a Torit Cartridge Filter.~~

4. On page 30 of 78, the facility description box has been changed to be as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

Stack ID 1-S-52: Unit IDs 52-1 through 52-2017 and 52-19 through 52-21. See facility descriptions below.

Unit ID	MDC (Tons/hr)	Combustion Summary	Control Equipment Description
52-1	Confidential	Confidential	Main Control System (52-1 through 4 F and H)

52-18	"" ""	"" ""	Baghouse & HEPA (52-6 F and H)
52-19	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-20	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-21	"" ""	"" ""	Baghouse & HEPA followed by Main Control System (52-1 through 4 F and H)

5. On page 31 of 78, Condition D.1.7 Stack ID 1-S-52 Performance Testing has been modified as follows:

D.1.7 Stack ID 1-S-52 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for lead emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM. Unit IDs 52-1 through 2017 and 19 through 21 shall be in operation during this test.

6. On page 32 of 78, Condition D.1.8 Monitoring of Air Pollution Control Equipment Operational Parameters has been modified as follows:

Control Unit ID	Pressure Drop (inches of water)
(Main Control System)	
52-1 F (Micro-Pul Baghouse)	0.1 - 10
52-1 H (HEPA)	0.1 - 5
52-2 F (Micro-Pul Baghouse)	0.1 - 10
52-2 H (HEPA)	0.1 - 5
52-3 F (Micro-Pul Baghouse)	0.1 - 10
52-3 H (HEPA)	0.1 - 5
52-4 F (Micro-Pul Baghouse)	0.1 - 10
52-4 H (HEPA)	0.1 - 5

(Unit ID 52-16)	
52-5 F (Baghouse)	0.1 - 10
52-5 H (HEPA)	0.1 - 5
(Unit ID 52-1821)	
52-68 F (Baghouse)	0.1 - 10
52-68 H (HEPA)	0.1 - 5

7. On page 59 of 78, the facility description box has been changed to be as follows:

SECTION D.10 FACILITY OPERATION CONDITIONS

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15V): Unit IDs 15-1, and 15-2, and 15-3.
Stack IDs associated with each unit are as follows:
a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, & R-1003
b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, & T-2000
c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, & T-3000
(Shared by all three units): R-1001, R-1004, & R-1005
(The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by a baghouse & HEPA system and a Torit Cartridge Filter, respectively **dust collectors**.

8. On page 59 of 78, Condition D.10.1 Particulate Matter less than 10 microns in diameter (PM10) has been modified as follows:

D.10.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for ~~stack 14-S-15V from the Expander Operation~~ shall be limited to 0.022 gr/dscf and 0.320 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d) **under Stack 14-S-15**.

9. On page 59 of 78, Condition D.10.2 Particulate Matter less than 10 microns in diameter (PM10) has been modified as follows:

D.10.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the ~~baghouse and HEPA system and Torit Cartridge Filter~~ **dust collectors** shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

10. On page 59 of 78, Condition 10.6 Monitoring of Air Pollution Control Equipment Operational Parameters has been modified as follows:

D.10.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each ~~baghouse (and HEPA dust collector where applicable)~~ when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Baghouse Dust Collectors: 0.1 to 40 20
HEPA: 0.1 to 10

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

Information on pages 59 and 60 has been shifted.

TSD (Public)

- On pages 1 and 2 of 44 (now renumbered pages 1 and 2 of 45), under TABLE 1: Facility Identification, (1) Stack ID 1-S-52, Unit ID 52-18 has been deleted and Unit ID 52-21 has been added as follows:

"" ""	52-18	Confidential	Baghouse & HEPA (52-6 F & H)
"" ""	52-19	Confidential	Main Control System
"" ""	52-20	Confidential	Main Control System
"" ""	52-21	Confidential	Baghouse & HEPA (52-8 F & H) followed by Main Control System

- On page 2 of 44 (now renumbered page 2 of 45), under TABLE 1: Facility Identification, (13) Stack ID 14-S-15V, Unit IDs 15-1 and 15-2 have been modified and Unit ID 15-3 has been added as follows:

(Expander Division)			
(13) Various Stack IDs 14-S-15V	15-1	Confidential	Baghouse & HEPA Dust Collectors
"" ""	15-2	Confidential	Terit Dust Collectors
"" ""	15-3	Confidential	Dust Collectors

Information on pages 1 through 3 has been shifted.

- On pages 3 and 4 of 44 (now renumbered pages 3 and 4 of 45), Stack ID 1-S-52, 7. Unit ID 52-18 has been deleted and Unit ID 52-21 has been added.

~~7. Unit ID 52-18~~

~~(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).~~

~~This unit is not controlled by the Main Control System. It has its own baghouse & HEPA system (52-6 F & H) which exhausts through stack 1-S-52.~~

87. Unit ID 52-20

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

8. Unit ID 52-21

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

4. On pages 6 and 7 of 44 (now renumbered pages 6 and 7 of 45), Stack ID 14-S-15V has been modified as follows:

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15V)

1. Unit IDs 15-1, ~~and 15-2,~~ and 15-3

Stack IDs associated with each unit are as follows:

- a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, and R-1003
- b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, and T-2000
- c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, and T-3000

(Shared by all three units): R-1001, R-1004, and R-1005

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

The emissions from Unit IDs-15-1, **15-2, and 15-3** are controlled by ~~a baghouse and HEPA system~~ **dust collectors.**

~~The emissions from Unit ID 15-2 are controlled by a Torit Cartridge Filter.~~

5. On page 9 of 44 (now renumbered page 9 of 45) within TABLE 2: Permit Emission Limits by Stack ID, (13) Stack ID 14-S-15V has been modified as follows:

(Expander Division)						
(13) Various Stack IDs 14-S-15V	0.320	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A

6. On pages 12 and 13 of 44 (now renumbered pages 12 and 13 of 45), the Total PTE has been changed to be as follows:

Total PTE

PTE is defined as “the maximum capacity of a stationary source to emit a pollutant under its physical and operational design.” [326 IAC 2-7-1(28)]

Pollutant	PTE (tons/year)
PM	8,028.72 5,631.72
PM-10	8,028.61 5,631.60
SO ₂	0.141 0.136
VOC	1.302 1.250
CO	4.890 4.705
NO _x	23.547 22.665

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP	PTE (tons/year)
Lead (Pb)	2,106.05 2,094.38
TOTAL HAPs	2,106.05 2,099.01

7. On page 14 of 44 (now renumbered page 14 of 45), under Compliance Monitoring, 1. a) has been modified as follows:

a) Stack ID 1-S-52: Units 52-1 through 52-~~20~~**17** and **52-19 through 52-21**

8. On page 15 of 44 (now renumbered page 15 of 45), under Compliance Monitoring 2. a) 3) control equipment and pressure drop readings shall be added or modified as follows:

3) Unit ~~52-18~~**21**
~~52-68~~ F: 0.1 - 10
~~52-68~~ H: 0.1 - 5

9. On page 17 of 44 (now renumbered page 17 of 45), under Compliance Monitoring, 2. a) 21) control equipment and pressure drop readings shall be added or modified as follows:

21) Units 15-1, & 2, & **3**
~~15-1~~ FD: 0.1 – ~~40~~ **20**
~~15-1~~ H: ~~0.1~~ - 10
~~15-2~~ FD: 0.1 – ~~40~~ **20**
~~15-2~~ H: ~~0.1~~ - 10
~~15-3~~ D: ~~0.1~~ - ~~20~~ **20**

10. On page 18 of 44 (now renumbered page 18 of 45), under Compliance Monitoring, 2. b) 1) Daily visible stack emission notations will now be required for the following facilities:
- 1) Stack ID 1-S-52: Units 52-1 through 52-~~20~~**17 and 52-19 through 52-21**
11. On page 18 of 44 (now renumbered page 18 of 45), under Compliance Monitoring, 2. b) 13) Daily visible stack emission notations will now be required for the following facilities:
- 13) ~~Stack ID 14-S-15V~~ **Various Stack IDs associated with the Expander Operation**
- a) **Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, and R-1003**
 - b) **Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, and T-2000**
 - c) **Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, and T-3000**
- (Shared by all three units): R-1001, R-1004, and R-1005**

Information following has been shifted on pages 18 and 19.

12. On page of 24 of 44 (now renumbered page 24 of 45), Table 7, Stack ID 1-S-52, Unit 52-18 has been deleted and Unit ID 52-21 has been added as follows:

Table 7

Stack/Vent ID:	1-S-52 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 160°F	Flow: 25,813 ACFM
Emission Unit:	52-17	52-18 52-21	52-19	52-20
Date of Construction:	November, 1989	January, 1995 2002	September, 1995	1960
Alternative Scenario:	None	Propane Combustion	None	None
Pollution Control Equipment:	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouse & HEPA (52- 68 F & H) followed by Main Control System	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)
General Description of Requirement:	Requirement for stack 1-S-52:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-52:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-52:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

13. On page 37 of 44 (now renumbered page 37 of 45), Table 20, Stack ID 14-S-15V, Units IDs 15-1 and 15-2 have been modified and Unit 15-3 has been added as follows:

Table 20

Stack/Vent ID: 14-S-15V Various Stack IDs (Expander Division)				
Stack/Vent Dimensions:	Ht: 30 ft N/A	Dia: 42 in N/A	Temp: 70°F	Flow: 6150 1000 ACFM (Side A & B Per Ball Mill)
Emission Unit:	15-1	15-2	15-3	
Date of Construction:	October, 1996 To be determined	October, 1996 To be determined	To be determined	
Alternative Scenario:	None	None	None	
Pollution Control Equipment:	Baghouse & HEPA Dust Collectors	Forit Dust Collectors	Dust Collectors	
General Description of Requirement:	Requirement for stack 14-S-15:	PM & PM10 emission Limit		
Numerical Emission Limit:	Limits for entire stack 14-S-15:	PM & PM10: 0.022 gr/dscf; 0.320 lbs/hr		
Regulation/Citation:		326 IAC 6-1-10.1(d)		
Compliance Demonstration:		Compliance Testing and Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 14-S-15:	PM10		
Testing Method/Analysis:		In accordance with 326 IAC 3-2.1		
Testing Frequency/Schedule:		Every 5 years		
Submittal of Test Results:		w/in 45 days of the test		
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Stack IDs 1-S-52 and 14-S-15 of Appendix A: Source Emissions Calculations have also been modified.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact this Department at (219)853-6306.

Sincerely,

Debra Malone, Chief Engineer
Hammond Department of Environmental Management
Air Pollution Control Division

cc: Mindy Hahn, Permits Administration, IDEM-OAQ

DM

ENCLOSURES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
- AIR POLLUTION CONTROL DIVISION -

Hammond Group, Inc. (HGI)
2308 - 165th Street
Hammond, Indiana 46320

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F089-5200-00219	
Original Issued By: Ronald L. Novak, Director Hammond Department of Environmental Management	Issuance Date: <u>December 12, 1996</u>

First Significant Permit Modification 089-8517, issued on 9/18/97.
First Administrative Permit Amendment 089-9529, issued on 3/25/98.
Second Administrative Permit Amendment 089-9591, issued on 4/2/98.
Third Administrative Permit Amendment 089-9739, issued on 5/19/98.
Fourth Administrative Permit Amendment 089-10112, issued on 12/4/98.
Fifth Administrative Permit Amendment 089-11101, issued on 8/4/99.
Sixth Administrative Permit Amendment 089-11279, issued on 9/8/99.
Seventh Administrative Permit Amendment 089-11499, issued 11/5/99.
Eighth Administrative Permit Amendment 089-11790, issued 2/10/00.
Ninth Administrative Permit Amendment 089-12330, issued 6/16/00.
Tenth Administrative Permit Amendment 089-12418, issued 8/7/00.
Eleventh Administrative Permit Amendment 089-13795, issued 3/13/01.
Twelfth Administrative Permit Amendment 089-14471, issued 6/28/01.
Thirteenth Administrative Permit Amendment 089-14919, issued 10/5/01.
Fourteenth Administrative Permit Amendment 089-15040, issued 12/19/01.
Fifteenth Administrative Permit Amendment 089-15717, issued 4/25/02.

Sixteenth Administrative Permit Amendment: 089-15660	Pages Affected: FESOP, Pages 1, 3, 5, 8, 30 - 32, 59 & 60; TSD (Public Copy), Pages 1 - 4, 6, 7, 9, 12 - 15, 17 - 19, 24 & 37; Appendix A: Source Emissions Calculations (Public Copy), Page 1; TSD (Confidential Copy), Pages 2 - 5, 8, 11, 14, 16, 17, 19, 20, 26 & 39; and Appendix A: Source Emissions Calculations (Confidential Copy), Page 1, 30 - 32, 63 - 74 & 94.
Issued By: _____ Ronald L. Novak, Director Hammond Department of Environmental Management	Issuance Date: <u>February 20, 2003</u>

TABLE OF CONTENTS

Section	Description	Page No(s).
	COVER PAGE	1
	TABLE OF CONTENTS	2, 3
A	SOURCE SUMMARY	4
A.1	General Information	
A.2	Emission Units and Pollution Control Summary	
A.3	Insignificant Activities	
A.4	FESOP Applicability [326 IAC 2-8-2]	
B	GENERAL CONDITIONS	13
B.1	General Requirements [IC13-15] [IC 13-17]	
B.2	Definitions [326 IAC 2-8-1]	
B.3	Permit Term [326 IAC 2-8-4(2)]	
B.4	Enforceability [326 IAC 2-8-6]	
B.5	Termination of Right to Operate [326 IAC 2-8-9]	
B.6	Severability [326 IAC 2-8-4(4)]	
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	
B.8	Duty to Supplement & Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]	
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.10	Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]	
B.11	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]	
B.12	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.13	Preventive Maintenance Plan [326 IAC 2-8-4(9)] [326 IAC 1-6-3]	
B.14	Emergency Provision [326 IAC 2-8-12]	
B.15	Deviations from Permit Requirements and/or Conditions [326 IAC 2-8-4(3)(C)(ii)]	
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-3(h)] [326 IAC 2-8-8(a)] [326 IAC 2-8-8(b)] [326 IAC 2-8-8(c)]	
B.17	Permit Renewal [326 IAC 2-8-3(h)]	
B.18	Administrative Permit Amendment [326 IAC 2-8-10]	
B.19	Minor Permit Modification [326 IAC 2-8-11(a)] [326 IAC 2-8-11(b)]	
B.20	Significant Permit Modification [326 IAC 2-8-11(d)]	
B.21	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(1)(D)(i)]	
B.22	Operational Flexibility [326 IAC 2-8-15]	
B.23	Construction Permit Requirement [326 IAC 2-1]	
B.24	Inspection and Entry [326 IAC 2-8-5(a)(2)]	
B.25	Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]	

TABLE OF CONTENTS (cont.)

Section	Description	Page No(s).
C	SOURCE OPERATION CONDITIONS	24
	FACILITY OPERATION CONDITIONS	
D.1	Stack ID 1-S-52	30
D.2	Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26	34
D.3	Stack ID 16-s-56	37
D.4	Stack ID 4-S-35	41
D.5	Stack ID 1-S-27	44
D.6	Stack ID 6-S-33	47
D.7	Stack ID 4B-S-34	50
D.8	Stack ID 6-S-47	53
D.9	Stack ID V-1	56
D.10	Various Stack IDs assoc. w/Expander Operation (previously Stack ID 14-S-15)	59
D.11	Stack ID 18-S-49 and 18-S-24	61
D.12	Stack ID 20-S-37 and 20-S-42	62
D.13	Stack ID 20-S-39 and 20-S-44	64
D.14	Stack ID 20-S-48	66
D.15	Stack ID 14-S-45	68
D.16	Stack ID 17-S-25 and 17-S-40	70
D.17	Stack ID 20-S-36 and 20-S-41	72
D.18	Stack ID 20-S-38 and 20-S-43	74
	FORMS	
	Certification Form	76
	Deviation Forms (2)	77, 78
	Total Number of Permit Pages	78
	Total Number of Forms	3
	Technical Support Document	45
	Emissions Calculations	94

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates an inorganic chemicals and pigments manufacturing plant.

Responsible Official: Peter Wilke, President
Source Address: 2308 - 165th Street, Hammond, Indiana 46320-2406
Mailing Address: 5231 Hohman Avenue, P.O. Box 6408, Hammond, Indiana 46325 - 6408
SIC Code: 2819 & 2816
County Location: Lake
County Status: Nonattainment for TSP, PM10, SO2, and Ozone.

Source Status: Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

Stack ID 1-S-52

This stack is identified as the Main Control System. This control system is comprised of four (4) Micro-Pul, Reverse Jet Air Pulse Cleaning Units in parallel. Each unit includes a baghouse with 144, eight (8) foot long membrane type filter bags on wire support cages, and a HEPA unit with nine (9) HEPA filters. Each unit is rated at 99.9998% control efficiency according to the company. The following units are controlled by the Main Control System control equipment, except when otherwise specified.

Stack I-S-52 is used to exhaust the following facilities:

1. Unit ID 52-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

2. Unit IDs 52-2 to 52-10

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

3. Unit IDs 52-11 to 52-13

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

4. Unit ID 52-14

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

5. Unit ID 52-15, 16 & 19

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Unit ID 52-16 is not controlled by the Main Control System. It has its own baghouse & HEPA system (52-5 F & H) which exhausts through stack 1-S-52.

6. Unit ID 52-17

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

7. Unit ID 52-20

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

8. Unit ID 52-21

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26

1. Unit IDs 8-1, 16-1, 2-1, 26-1, & 26-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Each system is controlled by a Baghouse & HEPA system. The Baghouses are Micro-Pul Reverse Jet Air Pulse Cleaning Units with membrane-type bag filters on wire support cages. Each HEPA unit contains four (4) HEPA filters.

Stack ID 16-S-56

1. Unit ID 56-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by six (6) Baghouse & HEPA systems.

2. Unit ID 56-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by six (6) Baghouse & HEPA systems.

3. Unit ID 56-3

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 25, eight (8) foot long membrane type bag filters on wire support cages and a single HEPA filter.

4. Unit ID 56-4

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

5. Unit ID 56-5

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is drafted to a Torit Cartridge filter which contains four (4) cartridge filters followed by six (6) Baghouse & HEPA systems.

6. Unit ID 56-6

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by six (6) Baghouse & HEPA systems.

7. Unit ID 56-7

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by a Micro-Pul Reverse Jet Air Pulse Cleaning Unit with 130, eight (8) foot long membrane type bag filters on wire support cages and a HEPA unit with six (6) HEPA filters.

Stacks ID 4-S-35

1. Unit ID 35-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by a Baghouse & HEPA system. The Baghouse is a Micro-Pul Reverse Jet Air Pulse Cleaning Unit with 100, eight (8) foot long membrane type filters on wire support cages. The HEPA unit has a 4 HEPA filter system.

Stack ID 1-S-27

1. Unit ID 27-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This unit is controlled by a Baghouse & HEPA system. The Baghouse is a Micro-Pul Reverse Jet Air Pulse Cleaning Unit with 81, eight (8) foot long membrane type filters on wire support cages. The HEPA unit has a 4 HEPA filter system.

Stack IDs 18-S-49 & 18-S-24

1. Unit ID 49-1 & 24-1

Each unit is rated at 8.4 MMBtu/hr and is fueled by natural gas only. There are no pollution control equipment associated with these units.

Stack IDs 20-S-37 and 20-S-42

1. Unit IDs 37-1 and 42-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Each system is controlled by two (2) Mac Reverse Jet Air Pulse Cleaning Units with (21), five (5) foot long membrane type filter bags on wire support cages.

Stack IDs 20-S-39 & 20-S-44

1. Unit IDs 39-1 and 44-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Each system is controlled by a primary and secondary baghouse followed by a HEPA.

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15)

1. Unit IDs 15-1, 15-2, and 15-3

Stack IDs associated with each unit are as follows:

- a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, & R-1003
 - b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, & T-2000
 - c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, & T-3000
- (Shared by all three units): R-1001, R-1004, & R-1005

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

The emissions from Units ID 15-1, 15-2, and 15-3 are controlled by dust collectors.

Stack ID 6-S-33

1. Unit ID 33-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

This system is controlled by a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 264, eight (8) foot long membrane type bag filters on wire support cages. A HEPA filter system follows the bag filter containing nine (9) HEPA filters.

Stack ID 4B-S-34

1. Unit ID 34-1 and 34-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Both units share a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 100, eight (8) foot long membrane-type filter bags on wire support cages. The primary filter is followed by a HEPA unit with four (4) HEPA filters.

Stack ID 6-S-47

1. Unit ID 47-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

The emissions from the lead borate furnace and packing system are vented to a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 121, eight (8) foot long membrane-type filter bags on wire support cages. The primary filter is followed by a HEPA unit consisting of nine (9) HEPA filters.

Stack ID 13-S-48

1. Unit IDs 48-1, 48-2, 48-3, and 48-4

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Each system (Unit IDs 48-1 and 48-2) is vented to a Mikro-Pul Reverse Jet Air Pulse Cleaning Unit with (18) cellulose filter cartridges in each filter. These primary filters are followed by HEPA filters containing four (4) HEPA filters in each unit.

Each system (Unit IDs 48-3 and 48-4) is vented to a Reverse Jet Baghouse ("Mach" Model #9CAVR62-111) which vents into the South side HEPA unit.

Stack ID 14-S-45

1. Unit IDs 45-1 and 45-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD for AAF089-10112-00219).

The two systems share a MicroPul, Reverse Jet Air Pulse Cleaning Unit with 41, eight (8) foot long laminated filter bags on wire support cages.

Stack ID 17-S-25 and 17-S-40

1. Unit IDs 25-1 and 40-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

The control system on each system is comprised of a dust collecting hood and a scrubber. The scrubber is a high efficiency cyclonic unit manufactured by Fisher Klosterman, Inc. Model Number MS-350-L. The unit utilizes a variable inlet venturi throat, pumped water spray and holding tank, and a cyclonic separator section.

Stack ID 20-S-36 and 20-S-41

1. Unit IDs 36-1 and 41-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Each system is controlled by a cyclone and a MAC Reverse Jet Air Pulse Cleaning unit with 62, eight (8) foot long membrane type filter bags on wire support cages.

Stack ID 20-S-38 and 20-S-43

1. Unit IDs 38-1 and 43-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

Emissions from each system are controlled by two (2) MAC Reverse Jet Air Pulse Cleaning units with 21, five (5) foot long membrane type filter bags on wire support cages in each unit.

Stack ID V-1

1. Unit ID 1-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the TSD).

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (1) Space heaters, process heaters, or boilers using:
 - (a) Natural gas with heat input equal to or less than ten million (10,000,000) Btu per hour, and/or
 - (b) Propane or liquefied petroleum gas, or butane with heat input equal to or less than six million (6,000,000) Btu per hour.
- (2) Combustion source flame safety purging on startup.
- (3) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) VOC and HAP storage containers including:
 - (a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons and/or
 - (b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (5) Refractory storage not requiring air pollution control equipment.
- (6) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (7) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (8) Cleaners and solvents characterized as follows:
 - (a) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 °F) or;
 - (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

-
- (9) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.
 - (10) Closed loop heating and cooling systems.
 - (11) Structural steel and bridge fabrication activities including:
 - (a) cutting 200,000 linear feet or less of one inch (1") plates or equivalent
 - (b) using 80 tons or less of welding consumable
 - (12) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
 - (13) Operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
 - (14) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
 - (15) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
 - (16) Heat exchanger cleaning and repair.
 - (17) Process vessel degassing and cleaning to prepare for internal repairs.
 - (18) Paved and unpaved road and parking lots with public access.
 - (19) Underground conveyors.
 - (20) Asbestos abatement projects regulated by 326 IAC 14-10.
 - (21) Purging of gas lines and vessels related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
 - (22) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
 - (23) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
 - (24) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches.
 - (25) Grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
 - (26) Filter or coalescer media changeout.
 - (27) A laboratory as defined in 326 IAC 2-7-1(20)(C).

- (28) Building No. 8 Roof Vent (Warehouse).
- (29) Use of refrigerant in room air conditioners and compressed air dryers.
- (30) Reworking off-spec materials.
- (31) Reworking off process materials.
- (32) Recycling/Reprocessing of baghouse materials.
- (33) Fugitive emissions from Facility operations.
- (34) Water evaporator with 1.25 MMBtu/hr natural gas-fired burner.
- (35) Cold parts cleaner.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Hammond Department of Environmental Management and the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B

GENERAL CONDITIONS

-
- B.1 General Requirements [IC 13-15] [IC 13-17] (Prior to July 1, 1996: IC 13-7 and IC 13-1-1)
The permittee shall comply with the provisions of IC 13-15 (Permits Generally), IC 13-17 (Air Pollution Control) and the rules promulgated thereunder.
- B.2 Definitions [326 IAC 2-8-1]
Terms in this permit shall have the meaning assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11 (prior to July 1, 1996, IC 13-7-2, IC 13-1-1-2), 326 IAC 1-2, and 326 IAC 2-7 shall prevail.
- B.3 Permit Term [326 IAC 2-8-4(2)]
This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-5-5-3 (prior to July 1, 1996, IC 13-7-10-2.5), of the permit.
- B.4 Enforceability [326 IAC 2-8-6]
(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by HDEM and IDEM.
(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.
- B.5 Termination of Right to Operate [326 IAC 2-8-9]
The expiration of this permit terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-7.
- B.6 Severability [326 IAC 2-8-4(4)]
(a) The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
(b) Indiana rules from 326 IAC quoted in conditions in this permit are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard.
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
This permit does not convey any property rights of any sort or any exclusive privilege.
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Permits Branch, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall also provide additional information as requested by HDEM or IDEM - OAM, to determine the compliance status of the source in accordance with 326 IAC 2-8-5(a).
- (c) The Permittee shall furnish to HDEM and IDEM-OAM, within a reasonable time, any information that the HDEM or IDEM-OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (d) Upon written request, the Permittee shall also furnish to HDEM and IDEM - OAM, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records directly to the U.S. EPA, IDEM - OAM, and HDEM along with a claim of confidentiality.

Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM - OAM and HDEM).

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM - OAM and HDEM may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) enforcement action;
 - (2) permit termination, revocation and reissuance or modification; and
 - (3) denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]

Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

A responsible official is defined at 326 IAC 2-7-1(33).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually certify that the source has complied with the terms and conditions contained in this permit, including emission limitations, standards, and work practices. The certification shall be submitted by April 15 to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Compliance Data Section, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and to:

U.S. Environmental Protection Agency (EPA), Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) This annual compliance certification report required by this permit shall be timely if:

- (1) Delivered by U.S. mail and postmarked on or before the date it is due; or
- (2) Delivered by any other method if it is received and stamped by HDEM and IDEM - OAM, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:

- (1) The identification of each term and condition of this permit that is the basis of the certification;
- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period; and
- (5) Such other facts as HDEM and IDEM - OAM, may require to determine the compliance status of the source.

B.13 Preventive Maintenance Plan [326 IAC 2-8-4(9)] [326 IAC 1-6-3]

- (a) The Permittee shall prepare, maintain and implement Preventive Maintenance Plans as necessary including the following information on each:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

-
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Corrective actions that will be implemented in the event an inspection indicates an out of specification situation;
 - (4) A time schedule for taking such corrective actions including a schedule for devising additional corrective actions for situations that may not have been predicted; and
 - (5) Identification and quantification of the replacement parts which will be maintained in inventory for quick replacement.
- (b) Preventive Maintenance Plans shall be submitted to HDEM and IDEM - OAM, upon request and shall be subject to review and approval by HDEM and IDEM - OAM.

B.14 Emergency Provision [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided as follows:
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements of this permit;
 - (4) The Permittee notified HDEM and IDEM - OAM, within four (4) daytime business hours after the beginning of the emergency occurrence by telephone or facsimile;

(HDEM)

Telephone No.: (219) 853-6306

Facsimile No.: (219) 853-6343

(IDEM - OAM)

Telephone No.: 1-800-451-6027 (ask for Office of Air Management) or,

Telephone No.: 317-233-0178

Facsimile No.: 317-233-5967

- (5) The Permittee submitted written notice or by facsimile of the emergency to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Compliance Branch, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency. The notice shall fulfill the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(C)(33).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes any emergency or upset provision contained in 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) HDEM and IDEM - OAM, may require that the preventive maintenance plan required under 326 IAC 2- 8-3(c)(6) be revised in response to an emergency.
 - (f) Failure to notify HDEM and IDEM - OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

-
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) the Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.
 - (C) Any operations shall continue no longer than the minimum time required to prevent the situations identified in clause (B) above.

- B.15 Deviations from Permit Requirements and/or Conditions [326 IAC 2-8-4(3)(C)(ii)]
Deviations from requirements, (for emergencies see Condition B.14 - Emergency Provision) the probable cause of such deviations, and any corrective actions or preventive measures taken shall be reported to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Compliance Branch, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

Written notification shall be submitted on the attached Deviation Occurrence Reporting Forms.

- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8(a)]
[326 IAC 2-8-8(b)] [326 IAC 2-8-8(c)]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13- 15-7-2 (prior to July 1, 1996, in IC 13-7-10-5) or if the commissioner determines any of the following:
 - (1) That it contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

- (c) Proceedings by HDEM and IDEM - OAM, to reopen and revise this permit shall follow the same procedures that apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practical. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by HDEM or IDEM - OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that HDEM and IDEM - OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by HDEM and IDEM - OAM, and shall include, at minimum, the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(20).

Request for renewal shall be submitted to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-5-3]
 - (1) The Permittee has a duty to submit a timely and complete permit renewal application. A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) Delivered by U. S. mail and postmarked on or before the date it is due; or
 - (C) Delivered by any other method if it is received and stamped by HDEM and IDEM - OAM, on or before the date it is due.
 - (2) If HDEM and IDEM - OAM fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) **Right to Operate After Application of Renewal** [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until HDEM or IDEM - OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by HDEM or IDEM - OAM, any additional information identified as needed to process the application.

B.18 Administrative Permit Amendment [326 IAC 2-8-10]

- (a) An administrative permit amendment is a FESOP revision that makes changes of the type specified under 326 IAC 2-8-10(a).
- (b) An administrative permit amendment may be made by HDEM or IDEM - OAM, consistent with the procedures specified under 326 IAC 2-8-10(b).
- (c) The Permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Minor Permit Modification [326 IAC 2-8-11(a)] [326 IAC 2-8-11(b)(1) and (2)]

- (a) A permit modification is any revision to this permit that cannot be accomplished as an administrative permit amendment under 326 IAC 2-8-10.
- (b) Minor permit modification procedures shall follow the procedures specified under 326 IAC 2-8-11(b)(1)(A) through (F).
- (c) An application requesting the use of minor modification procedures shall meet the requirements of 326 IAC 2-8-3(c) and shall include the information required in 326 IAC 2-8-11(b)(3)(A) through (D).
- (d) The Permittee may make the change proposed in its minor permit modification application immediately after it files such application unless the change is subject to the construction permit requirements of 326 IAC 2-1, 326 IAC 2-2, and 326 IAC 2-3. After the Permittee makes the change allowed under minor permit modification procedures, and until HDEM or IDEM - OAM takes any of the actions specified in 326 IAC 2-8-11(b)(5), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. If the Permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. [326 IAC 2-8-11(b)(6)]

B.20 Significant Permit Modification [326 IAC 2-8-11(d)]

- (a) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments.
- (b) Any significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions of this permit shall be considered significant.

- (c) Nothing in 326 IAC 2-8-11(d) shall be construed to preclude the Permittee from making changes consistent with 326 IAC 2-8 that would render existing permit compliance terms and conditions irrelevant.
- (d) Significant modifications of this permit shall meet all requirements of 326 IAC 2-8, including those for application, public participation, and review by the U.S. EPA, as they apply to permit issuance and renewal.

B.21 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(1)(D)(i)]
Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable FESOP's, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable implementation plan (SIP) or in applicable requirements promulgated by the U.S. EPA.

B.22 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - (3) The Permittee notifies the:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division
Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604 - 3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

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- (4) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, for public review. Such records shall consist of all information required to be submitted to HDEM and IDEM - OAM, in the notices specified in 326 IAC 2-8-15(b)(1), (c)(1), and (d).
- (b) For each such change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.
- (c) Emission Trades [326 IAC 2-8-15(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(c).
 - (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7) and subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(d).
- B.23 Construction Permit Requirement [326 IAC 2-1]
Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Hammond Department of Environmental Management and the Office of Air Management (OAM).
- B.24 Inspection and Entry [326 IAC 2-8-5(a)(2)]
Upon presentation of HDEM or IDEM identification cards, credentials, and other documents as may be required by law, the Permittee shall allow HDEM, IDEM-OAM, U.S. EPA, or an authorized representative to perform the following:
- (a) Enter upon the Permittee's premises where a FESOP source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

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- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of demonstrating compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of demonstrating compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]

B.25 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM - OAM, consistent with the fee schedule established in 326 IAC 2-8-16.
- (b) Failure to pay may result in administrative enforcement action, revocation of this permit, referral to the Office of Attorney General for collection, or other appropriate measures.
- (c) The Permittee shall pay the annual fee within thirty (30) calendar days of receipt of a billing by IDEM - OAM or in a time period that is consistent with the payment schedule issued by IDEM - OAM.
- (d) If the Permittee does not receive a bill from IDEM - OAM, thirty (30) calendar days before due date, the Permittee shall call the following telephone numbers: 1-800-451-6027 or 317-233-0179 (ask for OAM, Data Support Section) to determine the appropriate permit fee. The applicable fee is due April 1 of each year.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Overall Source Limit (326 IAC 2-8)

Pursuant to 326 IAC 2-8, emissions of VOC from the entire source shall not exceed 24 tons per 365 day period. Emissions of any other regulated pollutant from the entire source shall not exceed 99 tons per 365 day period. Emissions of hazardous air pollutants (HAPs) from the entire source shall not exceed 9 tons per 365 day period for any individual HAP or 24 tons per 365 day period of any combination of HAPs. Emissions shall include those from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7-1(20). The source shall be allowed to add insignificant activities not already listed in this permit, as long as the total emissions from the source do not exceed the above specified limits. In the event that any condition or combination of conditions in Section D of this permit differs from the above, the most restrictive limit will prevail.

C.2 Opacity

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall not exceed an average of 20 percent opacity in 24 consecutive readings.

C.3 Open Burning

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

C.4 Fugitive Dust Emissions

The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten (10) percent. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

C.5 Operation of Equipment [326 IAC 2-8-5(a)(4)]

- (a) All equipment that potentially might emit pollutants into the ambient air shall be properly operated and maintained.
- (b) Unless otherwise stated in this permit, all air pollution control equipment listed in this permit shall be operated at all times when the emission unit(s) vented to the control equipment is in operation.
- (c) The permittee shall perform all necessary maintenance and make all necessary attempts to keep all air pollution control equipment in proper operating condition at all times.

Testing [326 IAC 2-8-4(3)]

C.6 Performance Testing

Compliance testing shall be conducted on the facilities specified in Section D of this permit for the specified pollutant within three (3) years of issuance of the FESOP. All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures) and by methods in the approved test protocol. The test protocol shall be submitted to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Compliance Data Section, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

at least thirty-five (35) days before the intended test date. [326 IAC 3-2.1-2(a)]

Compliance Monitoring [326 IAC 2-8-5(a)(1)]

C.7 Compliance Monitoring [326 IAC 2-8-4(3)]

Compliance with applicable requirements shall be documented in accordance with the provisions of 326 IAC 2-8-4(3). The Permittee shall be responsible for installing any necessary equipment and initiating any additional monitoring no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and

Indiana Department of Environmental Management,
Compliance Data Section, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, with full justification of the reasons for inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(C)(33).

C.8 Maintenance of Monitoring Equipment [326 IAC 1-6]

The Permittee shall perform all necessary maintenance and make all necessary attempts to keep all required monitoring equipment in proper operating condition at all times. In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. Preventive maintenance plans of the monitors shall be implemented. In addition prompt correction, as indicated, shall be

initiated within the time frames specified, whenever the parameters monitored fall outside of the indicated values.

C.9 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the requirements of this permit shall be performed, whenever applicable according to the provisions of 326 IAC 3, or 40 CFR Part 60, Appendix A, as appropriate, unless some other method is specified in this permit.

C.10 Pressure Gauge Specifications

Whenever a condition in this permit requires the taking of pressure drop across any part of the unit or its control device the gauge employed shall be maintained as specified by the manufacturer.

Corrective Actions [326 IAC 2-8-4(1)] [326 IAC 2-8-5(1)]

C.11 Failure to Take Corrective Action

For each unit for which parametric monitoring is required, appropriate corrective actions as described in the Preventive Maintenance Plan shall be taken when indicated by monitoring information. Failure to take corrective action following an excursion of a surrogate monitoring parameter within the indicated time may constitute a violation of the permit coupled with any one of the following conditions:

- (a) The permittee fails to determine and document the cause of the excursion; or
- (b) Taking corrective action as set in the Plan would be unreasonable; or
- (c) Failure to take corrective action results in the exceedance of an enforceable emission limitation, in which case the violation would be of the underlying standard and may result in a more severe penalty.

After investigating the reason for the excursion, the permittee may be excused from taking further corrective action for any of the following reasons:

- (a) Providing that prompt action was taken to correct the monitoring equipment, that the monitoring equipment malfunctioned, giving a false reading; or
- (b) The permittee has determined that the parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
- (c) An automatic measurement was taken when the process was not operating; or
- (d) The permittee determines that the process has already returned to operating within "normal" parameters and no corrective action is required.

Records shall be kept of all instances in which the action values were not met and of all corrective actions taken. In the event of an "emergency" as defined in 326 IAC 2-8-12 the provisions of that rule requiring prompt corrective action to mitigate emissions shall prevail.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

Whenever the results of the stack test performed in conformance with Condition C.6 - Performance Testing, of this permit exceed the level specified in any condition of this permit, appropriate corrective actions shall be submitted to HDEM and IDEM-OAM within 30 (thirty) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAM that they are not acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.

Record Keeping and Reporting [326 IAC 2-8-4(3)]

C.13 Emission Reporting [326 IAC 2-6]

- (a) The Permittee shall submit a certified, annual emission statement that meets the requirements of 326 IAC 2-6 (Emission Reporting). This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year). The annual statement must be submitted to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and

Indiana Department of Environmental Management,
Data Support Section, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) This annual emission statement required by this permit shall be timely if:
- (1) Delivered by U.S. mail and postmarked on or before the date it is due;
or
 - (2) Delivered by any other method if it is received and stamped by HDEM and IDEM - OAM, on or before the date it is due.

C.14 Monitoring Data Availability

All notations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions. Records shall be kept of the times that the equipment is not operating. If the equipment is operating but abnormal conditions prevail, additional notations and sampling should be taken with a record made of the nature of the abnormality. If for reasons beyond its control, the operator fails to make required notations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded. At its discretion, HDEM or IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed 5%

of the operating time in any quarter. Temporary, unscheduled unavailability of staff qualified to perform the required notations, sampling, maintenance procedures, or record keeping shall be considered a valid reason.

C.15 General Record Keeping Requirements

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within twenty four-hours upon verbal request of an HDEM or IDEM - OAM representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two years providing they are made available within thirty (30) days after written request.
- (b) Records of required monitoring information shall include:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytical techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) All preventive maintenance and corrective actions that were implemented. Such records shall briefly describe what was done and indicate who did it;
 - (5) Relevant work purchase orders;
 - (6) Quality assurance and quality control procedures;
 - (7) Operator's standard operating procedures;
 - (8) Manufacturer's specifications or their equivalent; and
 - (9) Equipment "troubleshooting" guidance.

C.16 General Reporting Requirements

-
- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

and to:

Indiana Department of Environmental Management,
Compliance Data Section, Office of Air Management,
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be timely if:
- (1) Delivered by U.S. mail and postmarked on or before the date it is due;
or
 - (2) Delivered by any other method if it is received and stamped by HDEM and IDEM - OAM, on or before the date it is due.
- (c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.
- (e) The first report shall commence the date of issuance of this permit.

SECTION D.1

FACILITY OPERATION CONDITIONS

Stack ID 1-S-52: Unit IDs 52-1 through 52-17 and 52-19 through 52-21. See facility descriptions below.

Facility Descriptions

Unit ID	MDC (Tons/hr)	Combustion Summary	Control Equipment Description
52-1	Confidential	Confidential	Main Control System (52-1 through 4 F and H)
52-2	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-3	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-4	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-5	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-6	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-7	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-8	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-9	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-10	"" ""	"" ""	Main Control System (52-1 through 4 F and H)
52-11	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-12	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-13	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-14	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-15	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-16	"" ""	N/A	Baghouse & HEPA (52-5 F and H)
52-17	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-19	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-20	"" ""	N/A	Main Control System (52-1 through 4 F and H)
52-21	"" ""	N/A	Baghouse & HEPA followed by Main Control System (52-1 through 4 F and H)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack ID 1-S-52 shall be limited to 0.022 gr/dscf and 1.000 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.1.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.1.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.1.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for stack ID 1-S-52 shall be limited to 0.070 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.1.5 Lead (Pb)

State/Federal

The baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.1.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.7 Stack ID 1-S-52 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for lead emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM. Unit IDs 52-1 through 17 and 19 through 21 shall be in operation during this test.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation.

Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Control Unit ID	Pressure Drop (inches of water)
(Main Control System)	
52-1 F (Micro-Pul Baghouse)	0.1 - 10
52-1 H (HEPA)	0.1 - 5
52-2 F (Micro-Pul Baghouse)	0.1 - 10
52-2 H (HEPA)	0.1 - 5
52-3 F (Micro-Pul Baghouse)	0.1 - 10
52-3 H (HEPA)	0.1 - 5
52-4 F (Micro-Pul Baghouse)	0.1 - 10
52-4 H (HEPA)	0.1 - 5
(Unit ID 52-16)	
52-5 F (Baghouse)	0.1 - 10
52-5 H (HEPA)	0.1 - 5
(Unit ID 52-21)	
52-8 F (Baghouse)	0.1 - 10
52-8 H (HEPA)	0.1 - 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.1.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.1.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- The affected compartments will be shut down immediately until the units have been replaced.
- Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.1.11 Periodic Emissions Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.2

FACILITY OPERATION CONDITIONS

Stack IDs 4A-S-8, 14-S-16, 1-S-2, and 1-S-26

Facility Descriptions

Unit ID	MDC (Tons/hr)	Combustion Summary	Control Equipment Description
8-1	Confidential	Confidential	Baghouse & HEPA
16-1	Confidential	Confidential	Baghouse & HEPA
2-1	Confidential	Confidential	Baghouse & HEPA
26-1	Confidential	Confidential	Baghouse & HEPA
26-2	Confidential	Confidential	Baghouse & HEPA

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for each stack (4A-S-8, 14-S-16, 1-S-2, and 1-S-26) shall be limited to 0.022 gr/dscf and 0.250 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.2.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.2.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.2.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for each stack (4A-S-8, 14-S-16, 1-S-2, and 1-S-26) shall be limited to 0.053 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.2.5 Lead (Pb)

State/Federal

The baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.2.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.2.7 Performance Testing

Stack 1-S-26 was compliance tested on February 14, 1996. Thus, no initial stack testing will be required from these facility.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.2.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 8-1)	
8-1 F (Baghouse)	0.1 - 15
8-1 H (HEPA)	0.1 - 5
(Unit ID 16-1)	
16-1 F (Baghouse)	0.1 - 15
16-1 H (HEPA)	0.1 - 2
(Unit ID 2-1)	
2-1 F (Baghouse)	0.1 - 5
2-1 H (HEPA)	0.1 - 2
(Unit ID 26-1 & 2)	
26-1 & 2 F (Baghouse)	0.1 - 15
26-1 & 2 H (HEPA)	0.1 - 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.2.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal.

For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.2.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.2.11 Periodic Emissions Testing

That the permittee shall perform lead emissions testing on one of these stacks every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.3 FACILITY OPERATION CONDITIONS

Stack ID 16-S-56: Unit ID 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, and 56-7. See facility descriptions below.

Facility Descriptions

Unit ID	MDC (Tons/hr)	Combustion Summary	Control Equipment Description
56-1	Confidential	Confidential	(6) Baghouse & HEPA Systems
56-2	Confidential	N/A	(6) Baghouse & HEPA Systems
56-3	Confidential	N/A	Baghouse & HEPA
56-4	Confidential	N/A	Baghouse & HEPA
56-5	Confidential	N/A	Torit Cartridge Filter followed by (6) Baghouse & HEPA Systems
56-6	Confidential	Confidential	(6) Baghouse & HEPA Systems
56-7	Confidential	N/A	Baghouse & HEPA

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 16-S-56 shall be limited to 0.022 gr/dscf and 1.000 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.3.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.3.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.3.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for stack 16-S-56 shall be limited to 0.200 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.3.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.3.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.3.7 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for lead emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.3.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 56-1)	
80-Bag Filter / 80-Bag HEPA	0.1 - 15 / 0.1 - 5
100-Bag Filter / 100-Bag HEPA	0.1 - 20 / 0.1 - 5
144-Bag Filter / 144-Bag HEPA	0.1 - 20 / 0.1 - 5
72-Bag Filter / 72-Bag HEPA	0.1 - 15 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
(Unit ID 56-2)	
80-Bag Filter / 80-Bag HEPA	0.1 - 15 / 0.1 - 5
100-Bag Filter / 100-Bag HEPA	0.1 - 20 / 0.1 - 5
144-Bag Filter / 144-Bag HEPA	0.1 - 20 / 0.1 - 5
72-Bag Filter / 72-Bag HEPA	0.1 - 15 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
(Unit ID 56-3)	
Baghouse	0.1 - 15
HEPA	0.1 - 5

(Unit ID 56-4)	
Baghouse	0.1 - 15
HEPA	0.1 - 15
(Unit ID 56-5)	
Torit	0.1 - 20
80-Bag Filter / 80-Bag HEPA	0.1 - 15 / 0.1 - 5
100-Bag Filter / 100-Bag HEPA	0.1 - 20 / 0.1 - 5
144-Bag Filter / 144-Bag HEPA	0.1 - 20 / 0.1 - 5
72-Bag Filter / 72-Bag HEPA	0.1 - 15 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
(Unit ID 56-6)	
80-Bag Filter / 80-Bag HEPA	0.1 - 15 / 0.1 - 5
100-Bag Filter / 100-Bag HEPA	0.1 - 20 / 0.1 - 5
144-Bag Filter / 144-Bag HEPA	0.1 - 20 / 0.1 - 5
72-Bag Filter / 72-Bag HEPA	0.1 - 15 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
Bag Filter / HEPA	0.1 - 20 / 0.1 - 5
(Unit ID 56-7)	
Baghouse	0.1 - 20
HEPA	0.1 - 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.3.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.3.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.3.11 Periodic Emissions Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.3.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.4

FACILITY OPERATION CONDITIONS

Stack ID 4-S-35: Unit ID 35-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by a Baghouse and HEPA system.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 4-S-35 shall be limited to 0.022 gr/dscf and 0.570 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.4.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.4.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.4.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for stack 4-S-35 shall be limited to 0.090 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.4.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.4.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.4.7 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for lead emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.4.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Baghouse: 0.1 to 15

HEPA: 0.1 to 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.4.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.4.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.4.11 Periodic Emission Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.4.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.5

FACILITY OPERATION CONDITIONS

Stack ID 1-S-27: Unit ID 27-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by a Baghouse and HEPA system.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 1-S-27 shall be limited to 0.022 gr/dscf and 0.290 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.5.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.5.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.5.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for 1-S-27 shall be limited to 0.020 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.5.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.5.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.5.7 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for lead emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.5.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Baghouse: 0.1 to 15
HEPA: 0.1 to 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.5.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.5.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.5.11 Periodic Emission Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.5.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.6

FACILITY OPERATION CONDITIONS

Stack ID 6-S-33: Unit ID 33-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by a Baghouse and HEPA system.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.6.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 6-S-33 shall be limited to 0.022 gr/dscf and 0.900 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.6.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.6.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.6.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for 6-S-33 shall be limited to 0.070 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.6.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.6.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.6.7 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for lead emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.6.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Baghouse: 0.1 to 15

HEPA: 0.1 to 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.6.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.6.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D. 6.11 Periodic Emission Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.6.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Inlet and outlet differential static pressure;
- (b) Cleaning cycle: frequency and differential pressure;
- (c) Visual stack emissions notations.

SECTION D.7

FACILITY OPERATION CONDITIONS

Stack ID 4B-S-34: Unit IDs 34-1 and 34-2. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by a Baghouse and HEPA system.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.7.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 4B-S-34 shall be limited to 0.022 gr/dscf and 0.400 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.7.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.7.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.7.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for 4B-S-34 shall be limited to 0.080 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.7.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.7.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.7.7 There are no stack testing requirements necessary for this facility.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.7.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Baghouse: 0.1 to 15

HEPA: 0.1 to 5

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.7.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.7.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.7.11 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;

(c) Visual stack emissions notations.

SECTION D.8

FACILITY OPERATION CONDITIONS

Stack ID 6-S-47: Unit ID 47-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by a Baghouse and HEPA system.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.8.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 6-S-47 shall be limited to 0.022 gr/dscf and 0.400 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.8.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA system shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.8.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.8.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for 6-S-47 shall be limited to 0.021 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.8.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.8.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.8.7 Performance Testing

This stack was compliance tested on August 23, 1995. Thus, no initial testing will be required from this facility.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.8.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Baghouse: 0.1 to 10

HEPA: 0.1 to 4

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.8.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.8.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.8.11 Periodic Emission Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements. Due to the recent fire, an extension in stack testing Stack ID 6-S-47 has granted. The permittee shall perform lead emissions testing on this stack by December 31, 2002.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.8.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.9 FACILITY OPERATION CONDITIONS

Stack ID V-1: Unit ID 1-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled three (3) HEPA units.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.9.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack V-1 shall be limited to 0.022 gr/dscf and 1.000 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.9.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA system shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.9.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.9.4 Lead (Pb)

State That pursuant to 326 IAC 15 (Lead Emission Limitations), the Pb emissions for V-1 shall be limited to 0.090 lbs/hr as specifically listed in 326 IAC 15-1-2(a)(6).

D.9.5 Lead (Pb)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total Pb emissions stay below 10 Tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.9.6 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.9.7 Performance Testing

This stack was compliance tested on October 22, 1992. Thus, no initial testing will be required from this stack.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.9.8 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Each HEPA: 0.1 to 10

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.9.9 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.9.10 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.9.11 Periodic Emission Testing

That the permittee shall perform lead emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.9.12 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.10

FACILITY OPERATION CONDITIONS

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15): Unit IDs 15-1, 15-2, and 15-3.

Stack IDs associated with each unit are as follows:

- a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, & R-1003
- b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, & T-2000
- c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, & T-3000

(Shared by all three units): R-1001, R-1004, & R-1005

(The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions are controlled by dust collectors.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.10.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions from the Expander Operation shall be limited to 0.022 gr/dscf and 0.320 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d) under Stack 14-S-15.

D.10.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the dust collectors shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.10.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.10.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.10.5 Performance Testing

That no later than three (3) years after receipt of this permit, the Permittee shall perform a compliance test for PM10 emissions in accordance with 326 IAC 3-2.1 and as approved by HDEM and IDEM - OAM.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.10.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each dust collector when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies

otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Dust Collectors: 0.1 to 20

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.10.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.10.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

D.10.9 Periodic Emission Testing

That the permittee shall perform PM10 emissions testing on this stack every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.10.10 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.11

FACILITY OPERATION CONDITIONS

Stack ID 18-S-49 and 18-S-24: Unit IDs 49-1 and 24-1. Each unit is rated at 8.4 MMBtu/hr and is natural gas fired only. There are no pollution control equipment associated with these units.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.11.1 Particulate Matter less than 10 microns in diameter (PM10)

State

That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 18-S-49 and 18-S-24 shall be limited to 0.003 lbs/MMBtu and 0.025 lbs/hr for each stack as specifically listed in 326 IAC 6-1-10.1(h) and shall fire natural gas only.

D.11.2 Particulate Matter (PM)

State

That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

There are no federal requirements that apply to this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.11.3 There are no testing requirements necessary for these facilities.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.11.4 Monitoring of Operational Parameters

That the Permittee shall maintain a monthly record of the fuel usage for each boiler. These records shall be made available upon request by HDEM or IDEM - OAM within (30) days after the request is made to the addresses listed in Section C - General Reporting Requirements.

SECTION D.12

FACILITY OPERATION CONDITIONS

Stack ID 20-S-37 and 20-S-42: Unit IDs 37-1 and 42-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Each unit is controlled by its own baghouse system.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.12.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 20-S-37 and 20-S-42 shall be limited to 0.022 gr/dscf and 0.200 lbs/hr for each stack as specifically listed in 326 IAC 6-1-10.1(d).

D.12.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.12.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.12.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.12.5 There are no testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.12.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Each Baghouse: 0.1 to 50

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.12.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.12.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.12.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.13

FACILITY OPERATION CONDITIONS

Stack ID 20-S-39 and 20-S-44: Unit IDs 39-1 and 44-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Each line is controlled by a primary and secondary baghouse followed by a HEPA unit.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.13.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 20-S-39 and 20-S-44 shall be limited to 0.022 gr/dscf and 0.496 lbs/hr for each stack as specifically listed in 326 IAC 6-1-10.1(d).

D.13.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse and HEPA systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.13.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.13.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.13.5 There are no testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.13.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Each unit: 0.1 to 15

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.13.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.13.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.13.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.14

FACILITY OPERATION CONDITIONS

Stack ID 13-S-48: Unit IDs 48-1, 48-2, 48-3, and 48-4. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Each line is controlled by either a primary filter or baghouse followed by a HEPA unit.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.14.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 13-S-48 shall be limited to 0.022 gr/dscf and 0.471 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.14.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the primary filter or baghouse and HEPA system shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.14.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.14.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.14.5 There are no testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.14.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Each unit: 0.1 to 15

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.14.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.14.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.14.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.15

FACILITY OPERATION CONDITIONS

Stack ID 14-S-45: Unit ID 45-1 and 45-2. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Emissions from both lines are controlled by a baghouse.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.15.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 14-S-45 shall be limited to 0.022 gr/dscf and 0.471 lbs/hr for each stack as specifically listed in 326 IAC 6-1-10.1(d).

D.15.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouse shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.15.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.15.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.15.5 There are no testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.15.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water: Baghouse: 0.1 to 15

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.15.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.15.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.15.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.16

FACILITY OPERATION CONDITIONS

Stack ID 17-S-25 and 17-S-40: Unit IDs 25-1 and 40-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Each system is controlled by a scrubber.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.16.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 17-S-25 and 17-S-40 shall be limited to 0.030 gr/dscf and 2.120 lbs/hr for each stack as specifically listed in 326 IAC 6-1-10.1(d).

D.16.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the scrubbers shall be operated at all times when the associated drum dryer is in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.16.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.16.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.16.5 There is no initial testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.16.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Scrubber: 0.1 to 15

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months..

D.16.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.16.8 Periodic Emission Testing

That the permittee shall perform PM10 emissions testing on either stack 17-S-25 or 17-S-40 every five (5) years in accordance with HDEM and IDEM requirements.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.16.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.17

FACILITY OPERATION CONDITIONS

Stack ID 20-S-36 and 20-S-41: Unit IDs 36-1 and 41-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Each line is controlled by a cyclone and baghouse.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.17.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 20-S-36 shall be limited to 0.022 gr/dscf and 0.395 lbs/hr and for stack 20-S-41 shall be limited to 0.022 gr/dscf and 0.450 lbs/hr as specifically listed in 326 IAC 6-1-10.1(d).

D.17.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the cyclone and baghouse systems shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.17.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.17.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.17.5 There are no testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.17.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Each Baghouse: 0.1 to 50

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.17.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.17.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.17.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

SECTION D.18

FACILITY OPERATION CONDITIONS

Stack ID 20-S-38 and 20-S-43: Unit IDs 38-1 and 43-1. (The process description is confidential. A detailed process is contained in the confidential copy of the TSD). Each line is controlled by two (2) baghouses.

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.18.1 Particulate Matter less than 10 microns in diameter (PM10)

State That pursuant to 326 IAC 6-1-10.1 (Lake County PM10 emission requirements), the PM10 emissions for stack 20-S-38 and 20-S-43 shall be limited to 0.022 gr/dscf and 0.087 lbs/hr for each stack as specifically listed in 326 IAC 6-1-10.1(d).

D.18.2 Particulate Matter less than 10 microns in diameter (PM10)

State/Federal

That the baghouses shall be operated at all times when the associated facilities are in operation. Operation of the air pollution control equipment according to the compliance monitoring requirements of this permit will ensure that the source total PM10 emissions stay below 100 tons per year. Therefore, the Part 70 (326 IAC 2-7) rules do not apply.

D.18.3 Particulate Matter (PM)

State That pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from each facility shall be set equal to the PM10 emission limits and that visible emissions from each facility shall not exceed 20% opacity.

D.18.4 Preventive Maintenance Plan

State/Federal

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.18.5 There are no testing requirements necessary for these facilities.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.18.6 Monitoring of Air Pollution Control Equipment Operational Parameters

That the control equipment shall be operated at all times when its associated facility is in operation. The Permittee shall take daily readings of the total static pressure drop across each baghouse (and HEPA where applicable) when the associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the control equipment shall be maintained within the following range(s) in inches of water:

Each Baghouse: 0.1 to 100

The Preventive Maintenance Plan for each of control equipment shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.10 - Pressure Gauge Specifications, be subject to approval by HDEM and IDEM, and shall be zero balanced, at minimum, every six months.

D.18.7 Daily Visual Stack Emission Notations

Daily visible emission notations of each stack shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.18.8 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised before the unit is restarted and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.18.9 Operational Parameters

That the Permittee shall maintain a daily record at the stationary source of the following values:

- (a) Differential static pressure across the control device;
- (b) Cleaning cycle frequency;
- (c) Visual stack emissions notations.

State Form 47738 (5-96)

**HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
- AIR POLLUTION CONTROL DIVISION -
and
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: **Hammond Group, Inc. (HGI)**
Source Address: 2308 - 165th Street, Hammond, Indiana 46320
FESOP No.: **F089-5200-00219**

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- ☐ Deviation Occurrence Reporting Form (For Control Equipment Monitoring)
- ☐ Deviation Occurrence Reporting Form (For Material Usage, Quality, Etc.)
- ☐ Relocation Notification
- ☐ Test Result (specify)
- ☐ Report (specify)
- ☐ Notification (specify)
- ☐ Other (specify)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

State Form 47739 (5-96)

**HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
- AIR POLLUTION CONTROL DIVISION -
AND
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
DEVIATION OCCURRENCE REPORTING FORM
(For Control Equipment Monitoring Only)**

Source Name: **Hammond Group, Inc. (HGI)**
Source Address: 2308 - 165th Street, Hammond, Indiana 46320
FESOP No.: **F089-5200-00219**

A separate copy of this report must be submitted for **each** monitoring device on all control equipment listed in this permit.
Attach a signed certification to complete this report.

Stack/Vent ID:	
Control Equipment:	
(ex: thermal oxidizer, scrubber, baghouses)	
Type of Parameter Monitored:	
(ex: temperature, pressure drop, efficiency)	
<input type="checkbox"/> Continuously <input type="checkbox"/> Periodically, at a frequency of:	
Parameter Operating Restrictions/Range:	
(ex: 1,400°F, 2-4 psi pressure drop)	
Report Covers From:	To:
(date: month/day/yr)	
<input type="checkbox"/> No Deviations from the Parameter Restriction/Range Occurred During the Monitoring Period. Records Maintained at the Facility Verify Compliance with this Condition.	Complete
<input type="checkbox"/> Summary of Deviations from the Parameter Restriction/Range During the Monitoring Period are Below. Complete Records Maintained at the Facility.	Identified

	For Parameter Recorded Continuously	For Parameter Recorded Periodically
Total Unit Operating Time		
Total Time of Deviations		
(Identify All Deviations)		
Percent of Time Indicating Deviations		
((I2)/(I1)x100)		

Date of Deviation	Start/Stop Time of Deviation (Continuous Monitoring Only)	Actual Value Recorded	Reason for Deviation & Corrective Action Taken

State Form 47741 (5-96)

**HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
- AIR POLLUTION CONTROL DIVISION -
AND
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
DEVIATION OCCURRENCE REPORTING FORM**

Source Name: **Hammond Group, Inc. (HGI)**
Source Address: 2308 - 165th Street, Hammond, Indiana 46320
FESOP No.: **F089-5200-00219**

A separate copy of this report must be submitted for **each** material type, quantity usage and operation limitation (except control equipment monitoring) listed in this permit . Attach a signed certification to complete this report.

Stack/Vent ID:

Equipment/Operation:

Parameter Subject to Material Type, Quantity Usage or Operation Limitations Specified in the Permit:

(ex: 2500 lb/day, 300 hours/yr, 5000 gallons/month)

Determination Period for this Parameter:

(ex: 365-day rolling sum, fixed monthly rate)

☐ Permit Has No Rate Limitations for this Parameter.

Content Restriction for this Parameter:

(ex: maximum of 40% VOC in inks, 0.5% sulfur content)

Demonstration Method for this Parameter:

(ex: MSDS, Supplier, material sampling & analysis)

☐ Permit Has No Content Limitations for this Parameter.

Comments:

Hammond Department of Environmental Management - Air Pollution Control Division -

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background And Description

Source Name: Hammond Group, Inc. - Hammond Facility
Source Location: 2308 - 165th Street, Hammond, Indiana 46320
County: Lake
Operation Permit No.: F089-5200-00219
Permit Reviewer: Jean Ziga, HDEM

The Hammond Department of Environmental Management (HDEM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Hammond Group, Inc. relating to the operation of **an Inorganic Chemicals and Pigments Manufacturing Plant**.

The source consists of the following fifty-five (55) emission units and pollution control devices:

TABLE 1: Facility Identification

Stack ID	Unit ID	MDC	Air Pollution Control Equipment
(Oxide Division)			
(1) Stack ID 1-S-52	52-1	Confidential	Main Control System
"" ""	52-2	Confidential	Main Control System
"" ""	52-3	Confidential	Main Control System
"" ""	52-4	Confidential	Main Control System
"" ""	52-5	Confidential	Main Control System
"" ""	52-6	Confidential	Main Control System
"" ""	52-7	Confidential	Main Control System
"" ""	52-8	Confidential	Main Control System
"" ""	52-9	Confidential	Main Control System
"" ""	52-10	Confidential	Main Control System
"" ""	52-11	Confidential	Main Control System
"" ""	52-12	Confidential	Main Control System
"" ""	52-13	Confidential	Main Control System
"" ""	52-14	Confidential	Main Control System
"" ""	52-15	Confidential	Main Control System
"" ""	52-16	Confidential	Baghouse & HEPA (52-5 F & H)
"" ""	52-17	Confidential	Main Control System

"" ""	52-19	Confidential	Main Control System
"" ""	52-20	Confidential	Main Control System
"" ""	52-21	Confidential	Baghouse & HEPA (52-8 F & H) followed by Main Control System
(2) Stack ID 4A-S-8	8-1	Confidential	Baghouse & HEPA
(3) Stack ID 14-S-16	16-1	Confidential	Baghouse & HEPA
(4) Stack ID 1-S-2	2-1	Confidential	Baghouse & HEPA
(5) Stack ID 1-S-26	26-1	Confidential	Baghouse & HEPA
"" ""	26-2	Confidential	Baghouse & HEPA
(6) Stack ID 16-S-56	56-1	Confidential	Baghouse & HEPA
"" ""	56-2	Confidential	Baghouse & HEPA
"" ""	56-3	Confidential	Baghouse & HEPA
"" ""	56-4	Confidential	Baghouse & HEPA
"" ""	56-5	Confidential	Torit, Baghouse & HEPA
"" ""	56-6	Confidential	Baghouse & HEPA
"" ""	56-7	Confidential	Baghouse & HEPA
(7) Stack ID 4-S-35	35-1	Confidential	Baghouse & HEPA
(8) Stack ID 1-S-27	27-1	Confidential	Baghouse & HEPA
(9) Stack ID 6-S-33	33-1	Confidential	Baghouse & HEPA
(10) Stack ID 4B-S-34	34-1	Confidential	Baghouse & HEPA
"" ""	34-2	Confidential	Baghouse & HEPA
(11) Stack ID 6-S-47	47-1	Confidential	Baghouse & HEPA
(12) Stack ID V-1	1-1	N/A	(3) HEPAs
(Expander Division)			
(13) Various Stack IDs	15-1	Confidential	Dust Collectors
"" ""	15-2	Confidential	Dust Collectors
"" ""	15-3	Confidential	Dust Collectors
(Halox Division)			
(14) Stack ID 18-S-49	49-1	Confidential	None
(15) Stack ID 20-S-37	37-1	Confidential	(2) Baghouses
(16) Stack ID 20-S-39	39-1	Confidential	Primary & Secondary Baghouse & HEPA Systems
(17) Stack ID 20-S-42	42-1	Confidential	(2) Baghouses
(18) Stack ID 20-S-44	44-1	Confidential	Primary & Secondary Baghouse & HEPA Systems
(19) Stack ID 13-S-48	48-1	Confidential	Primary Filter & HEPA
"" ""	48-2	Confidential	Primary Filter & HEPA
"" ""	48-3	Confidential	Baghouse & HEPA
"" ""	48-4	Confidential	Baghouse & HEPA
(20) Stack ID 14-S-45	45-1	Confidential	Baghouse
"" ""	45-2	Confidential	Baghouse
(21) Stack ID 17-S-25	25-1	Confidential	Scrubber
(22) Stack ID 17-S-40	40-1	Confidential	Scrubber
(23) Stack ID 18-S-24	24-1	Confidential	None

(24) Stack ID 20-S-36	36-1	Confidential	cyclone & Baghouse
(25) Stack ID 20-S-38	38-1	Confidential	(2) Baghouses
(26) Stack ID 20-S-41	41-1	Confidential	cyclone & Baghouse
(27) Stack ID 20-S-43	43-1	Confidential	(2) Baghouses

Process Descriptions

- Oxide Division -

Stack ID 1-S-52

This stack is identified as the Main Control System. This control system is comprised of four (4) Micro-Pul Reverse Jet Air Pulse Cleaning Units in parallel. Each unit includes a baghouse with 144, eight (8) foot long membrane type filter bags on wire support cages, and a HEPA unit with nine (9) HEPA filters. Each unit is rated at 99.9998% control efficiency according to the company. The following units are controlled by the Main Control System control equipment, except when otherwise specified.

Stack I-S-52 is used to exhaust the following facilities:

1. Unit ID 52-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

2. Unit IDs 52-2 to 52-10

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

3. Unit IDs 52-11 to 52-13

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

4. Unit ID 52-14

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

5. Unit ID 52-15, 16 & 19

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Unit ID 52-16 is not controlled by the Main Control System. It has its own baghouse & HEPA system (52-5 F & H) which exhausts through stack 1-S-52.

6. Unit ID 52-17

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

7. Unit ID 52-20

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

8. Unit ID 52-21

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26

1. Unit IDs 8-1, 16-1, 2-1, 26-1, & 26-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Each system is controlled by a Baghouse & HEPA system. The Baghouses are Micro-Pul Reverse Jet Air Pulse Cleaning Units with membrane-type bag filters on wire support cages. Each HEPA unit contains four (4) HEPA filters.

Stack ID 16-S-56

1. Unit ID 56-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by six (6) Baghouse & HEPA systems.

2. Unit ID 56-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by six (6) Baghouse & HEPA systems.

3. Unit ID 56-3

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 25, eight (8) foot long membrane type bag filters on wire support cages and a single HEPA filter.

4. Unit ID 56-4

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

5. Unit ID 56-5

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is drafted to a Torit Cartridge filter which contains four (4) cartridge filters followed by six (6) Baghouse & HEPA systems.

6. Unit ID 56-6

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by six (6) Baghouse & HEPA systems.

7. Unit ID 56-7

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by a Micro-Pul Reverse Jet Air Pulse Cleaning Unit with 130, eight (8) foot long membrane type bag filters on wire support cages and a HEPA unit with six (6) HEPA filters.

Stacks ID 4-S-35

1. Unit ID 35-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by a Baghouse & HEPA system. The Baghouse is a Micro-Pul Reverse Jet Air Pulse Cleaning Unit with 100, eight (8) foot long membrane type filters on wire support cages. The HEPA unit has a 4 HEPA filter system.

Stack ID 1-S-27

1. Unit ID 27-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This unit is controlled by a Baghouse & HEPA system. The Baghouse is a Micro-Pul Reverse Jet Air Pulse Cleaning Unit with 81, eight (8) foot long membrane type filters on wire support cages. The HEPA unit has a 4 HEPA filter system.

Stack ID 6-S-33

1. Unit ID 33-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This system is controlled by a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 264, eight (8) foot long membrane type bag filters on wire support cages. A HEPA filter system follows the bag filter containing nine (9) HEPA filters.

Stack ID 4B-S-34

1. Unit ID 34-1 and 34-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Both units share a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 100, eight (8) foot long membrane-type filter bags on wire support cages. The primary filter is followed by a HEPA unit with four (4) HEPA filters.

Stack ID 6-S-47

1. Unit ID 47-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

The emissions from the lead borate furnace and packing system are vented to a Micro-Pul Reverse Jet Air Pulse Cleaning unit with 121, eight (8) foot long membrane-type filter bags on wire support cages. The primary filter is followed by a HEPA unit consisting of nine (9) HEPA filters.

Stack ID V-1

1. Unit ID 1-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

- Expander Division -

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15)

1. Unit IDs 15-1, 15-2, and 15-3

Stack IDs associated with each unit are as follows:

- a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, and R-1003
- b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, and T-2000
- c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, and T-3000

(Shared by all three units): R-1001, R-1004, and R-1005

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

The emissions from Unit IDs 15-1, 15-2, and 15-3 are controlled by dust collectors.

- Halox Division -

Stack IDs 18-S-49 & 18-S-24

1. Unit ID 49-1 & 24-1

Each unit is rated at 8.4 MMBtu/hr and is fueled by natural gas only. There are no pollution control equipment associated with these units.

Stack IDs 20-S-37 and 20-S-42

1. Unit IDs 37-1 and 42-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Each system is controlled by two (2) Mac Reverse Jet Air Pulse Cleaning Units with (21), five (5) foot long membrane type filter bags on wire support cages.

Stack IDs 20-S-39 & 20-S-44

1. Unit IDs 39-1 and 44-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Each system is controlled by a primary and secondary baghouse followed by a HEPA.

Stack ID 13-S-48

1. Unit IDs 48-1 and 48-2

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Each system is vented to a Mikro-Pul Reverse Jet Air Pulse Cleaning Unit with (18) cellulose filter cartridges in each filter. These primary filters are followed by HEPA filters containing four (4) HEPA filters in each unit.

2. Unit ID 48-3

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This system is vented to a Reverse Jet Baghouse ("Mach" Model #9CAVR62-111) which vents into the South side HEPA unit.

3. Unit ID 48-4

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

This system is vented to a Reverse Jet Baghouse ("Mach" Model #9CAVR62-111) which vents into the South side HEPA unit.

Stack ID 14-S-45

1. Unit IDs 45- 1 and 45-2

Each packing operation consists of hoppers, packers, and interconnecting mechanical conveyors. Material is conveyed to the hoppers which feed the packers.

The two systems share a MicroPul Reverse Jet Air Pulse Cleaning Unit with 41, eight (8) foot long membrane type filter bags on wire support cages.

Stack ID 17-S-25 and 17-S-40

1. Unit IDs 25-1 and 40-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

The control system on each system is comprised of a dust collecting hood and a scrubber. The scrubber is a high efficiency cyclonic unit manufactured by Fisher Klosterman, Inc. Model Number MS-350-L. The unit utilizes a variable inlet venturi throat, pumped water spray and holding tank, and a cyclonic separator section.

Stack ID 20-S-36 and 20-S-41

1. Unit IDs 36-1 and 41-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Each system is controlled by a cyclone and a MAC Reverse Jet Air Pulse Cleaning unit with 62, eight (8) foot long membrane type filter bags on wire support cages.

Stack ID 20-S-38 and 20-S-43

1. Unit IDs 38-1 and 43-1

(The process description is Confidential. A detailed process description is contained in the Confidential copy of the FESOP).

Emissions from each system are controlled by two (2) MAC Reverse Jet Air Pulse Cleaning units with 21, five (5) foot long membrane type filter bags on wire support cages in each unit.

TABLE 2: Permit Emission Limits by Stack ID

Stack ID	PM10 Limit (lbs/hr)	PM10 Regulation	Pb Limit (lbs/hr)	Pb Regulation	SO2 Limit (lbs/hr)	SO2 Regulation
(Oxide Division)						
(1) Stack ID 1-S-52	1.000	326 IAC 6-1-10.1(d)	0.070	326 IAC 15-1-2(a)(6)	N/A	N/A
(2) Stack ID 4A-S-8	0.250	326 IAC 6-1-10.1(d)	0.053	326 IAC 15-1-2(a)(6)	N/A	N/A
(3) Stack ID 14-S-16	0.250	326 IAC 6-1-10.1(d)	0.053	326 IAC 15-1-2(a)(6)	N/A	N/A
(4) Stack ID 1-S-2	0.250	326 IAC 6-1-10.1(d)	0.053	326 IAC 15-1-2(a)(6)	N/A	N/A
(5) Stack ID 1-S-26	0.250	326 IAC 6-1-10.1(d)	0.053	326 IAC 15-1-2(a)(6)	N/A	N/A
(6) Stack ID 16-S-56	1.000	326 IAC 6-1-10.1(d)	0.200	326 IAC 15-1-2(a)(6)	N/A	N/A
(7) Stack ID 4-S-35	0.570	326 IAC 6-1-10.1(d)	0.090	326 IAC 15-1-2(a)(6)	N/A	N/A
(8) Stack ID 1-S-27	0.290	326 IAC 6-1-10.1(d)	0.020	326 IAC 15-1-2(a)(6)	N/A	N/A
(9) Stack ID 6-S-33	0.900	326 IAC 6-1-10.1(d)	0.070	326 IAC 15-1-2(a)(6)	N/A	N/A
(10) Stack ID 4B-S-34	0.4	326 IAC 6-1-10.1(d)	0.080	326 IAC 15-1-2(a)(6)	N/A	N/A
(11) Stack ID 6-S-47	0.400	326 IAC 6-1-10.1(d)	0.021	326 IAC 15-1-2(a)(6)	N/A	N/A
(12) Stack ID V-1	1.000	326 IAC 6-1-10.1(d)	0.090	326 IAC 15-1-2(a)(6)	N/A	N/A
(Expander Division)						
(13) Various Stack IDs	0.320	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(Halox Division)						
(14) Stack ID 18-S-49	0.025	326 IAC 6-1-10.1(h)	N/A	N/A	0.005	Hammond AQC Ordinance
(15) Stack ID 20-S-37	0.200	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(16) Stack ID 20-S-39	0.496	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(17) Stack ID 20-S-42	0.200	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(18) Stack ID 20-S-44	0.496	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(19) Stack ID 13-S-48	0.471	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(20) Stack ID 14-S-45	0.471	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A

(21) Stack ID 17-S-25	2.120	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(22) Stack ID 17-S-40	2.120	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(23) Stack ID 18-S-24	0.025	326 IAC 6-1-10.1(h)	N/A	N/A	0.005	Hammond AQC Ordinance
(24) Stack ID 20-S-36	0.395	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(25) Stack ID 20-S-38	0.087	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(26) Stack ID 20-S-41	0.450	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
(27) Stack ID 20-S-43	0.087	326 IAC 6-1-10.1(d)	N/A	N/A	N/A	N/A
Totals: (lbs/hr)	14.523		0.853		0.010	
(TPY)	63.611		3.736		0.044	

The source also includes the following **insignificant activities**:

- (1) Space heaters, process heaters, or boilers using:
 - (a) Natural gas with heat input equal to or less than ten million (10,000,000) Btu per hour, and/or
 - (b) Propane or liquefied petroleum gas, or butane with heat input equal to or less than six million (6,000,000) Btu per hour.
- (2) Combustion source flame safety purging on startup.
- (3) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) VOC and HAP storage containers including:
 - (a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons and/or
 - (b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (5) Refractory storage not requiring air pollution control equipment.
- (6) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (7) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (8) Cleaners and solvents characterized as follows:
 - (a) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 °F) or;
 - (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

-
- (9) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.
 - (10) Closed loop heating and cooling systems.
 - (11) Structural steel and bridge fabrication activities including:
 - (a) cutting 200,000 linear feet or less of one inch (1") plates or equivalent
 - (b) using 80 tons or less of welding consumable
 - (12) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
 - (13) Operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
 - (14) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
 - (15) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
 - (16) Heat exchanger cleaning and repair.
 - (17) Process vessel degassing and cleaning to prepare for internal repairs.
 - (18) Paved and unpaved road and parking lots with public access.
 - (19) Underground conveyors.
 - (20) Asbestos abatement projects regulated by 326 IAC 14-10.
 - (21) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
 - (22) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
 - (23) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
 - (24) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches.
 - (25) Grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
 - (26) Filter or coalescer media changeout.
 - (27) A laboratory as defined in 326 IAC 2-7-1(20)(C).
 - (28) Building No. 8 Roof Vent (Warehouse).
 - (29) Use of refrigerant in room air conditioners and compressed air dryers.

- (30) Reworking off-spec materials.
- (31) Reworking off process materials.
- (32) Recycling/Reprocessing of baghouse materials.
- (33) Fugitive emissions from Facility operations.
- (34) Water evaporator with 1.25 MMBtu/hr natural gas-fired burner.
- (35) Cold parts cleaner.

Enforcement Issues

There are no enforcement issues HDEM is aware of pending for this source.

Recommendations

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete FESOP application for the purposes of this review was received on **January 5, 1996**.

A revised application was submitted on August 19, 1996.

Potential to Emit (PTE) Calculations

See Appendix A, Potential to Emit (PTE) Calculation for detailed calculations.

Total PTE

PTE is defined as "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design." [326 IAC 2-7-1(28)]

Pollutant	PTE (tons/year)
PM	5,631.72
PM-10	5,631.60
SO ₂	0.136
VOC	1.250
CO	4.705
NO _x	22.665

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP	PTE (tons/year)
Lead (Pb)	2,094.38
TOTAL HAPs	2,099.01

The potential to emit (as defined in the Indiana Rule) of Particulate Matter less than 10 microns in diameter (PM10) is greater than 100 tons per year. Also, the potential to emit (as defined in Indiana Rule) of any single HAP (Lead) is greater than 10 tons/year. Therefore, the source is subject to the provisions of 326 IAC 2-7-1.

A source with "potential to emit" high enough to make it a "major source" but whose actual emissions are below the Part 70 emission levels may elect to avoid the Part 70 Operating Permit Program by agreeing to accept a permit with federally enforceable limits that restrict its PTE to below the major source emission levels. The permit containing these restrictions is called a Federally Enforceable State Operating Permit (FESOP).

County Attainment Status

The source is located in **Lake County**.

Pollutant	Status (attainment or unclassifiable/severe, moderate, marginal, or maintenance nonattainment)
TSP	Primary Nonattainment
PM-10	Moderate Nonattainment
SO ₂	Primary Nonattainment
Ozone	Severe Nonattainment
CO	Unclassifiable/Attainment
NO ₂	Severe Nonattainment
Pb	Unclassifiable

Limited PTE

The source has a federally enforceable **PM10** limit of 63.611 tons per year and 3.736 tons per year for **lead (Pb)**.

*See Table 2 above for Limits per facility.

	Limited PTE (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs (Pb)
Total Emissions	63.611	63.611	N/A	N/A	N/A	26	3.736

PM10 emissions are limited in accordance with 326 IAC 6-1-10.1. PM emissions were set equal to the PM10.

Lead emissions are limited in accordance with 326 IAC 15-1-2(a)(6).

SO₂, VOC, and CO emissions are negligible.

NO_x emissions are limited to the source's PTE, raised to the next whole number. These pollutants are not limited by any applicable regulations and do not exceed the major source thresholds.

Attached Tables 3 to 28 summarize the permit conditions and requirements.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) applicable to any facility in this source.

There are no National Emission Standards of Hazardous Air Pollutants (326 IAC 14) applicable to any facility in the source.

State Rule Applicability

326 IAC 2-6

Pursuant to this rule, this source is required to submit a certified, annual emission statement.

326 IAC 5-1-2 (Visible Emission Limitations)

Pursuant to this rule, visible emissions shall not exceed an average of 20% opacity in 24 consecutive readings.

326 IAC 6-1-10.1

This rule limits PM₁₀ emissions from each stack at the source as listed in 326 IAC 6-1-10.1(d) and (h).

326 IAC 15-1-2

This rule limits lead (Pb) emissions from stacks associated with the Oxide Division as stipulated in 326 IAC 15-1-2(a)(6).

Compliance Monitoring

1. Facilities associated with the Oxide Division of Hammond Group, Inc. are required to perform a compliance stack test to demonstrate compliance with the applicable lead (Pb) emission limits. Performance testing is required initially within three (3) years after receipt of the permit and then periodically, every five (5) years. However, due to the completion of recent compliance testing, the initial test is not required for stacks 6-S-47, 1-S-26, and V-1. This requirement applies to the following facilities:
 - a) Stack ID 1-S-52: Units 52-1 through 52-17 and 52-19 through 52-21
 - b) One of Stack IDs 4A-S-8, 14-S-16, 1-S-2, and 1-S-26
 - c) Stack ID 16-S-56: Units 56-1 through 56-6
 - d) Stack ID 4-S-35
 - e) Stack ID 1-S-27
 - f) Stack ID 6-S-33
 - g) Stack ID 6-S-47 (Stack testing deadline extended until December 31, 2002)
 - h) Stack ID V-1

This monitoring condition is necessary to ensure compliance with 326 IAC 15 (Lead Emission Limitations) and 326 IAC 2-8 (FESOP).

2. The following facilities have applicable compliance monitoring conditions as specified below:

- a) The total static pressure drop across the control equipment must be measured and recorded daily. The pressure drop for the units shall be maintained within the following ranges in inches of water.

1) Main Control System

52-1 F: 0.1 - 10
52-1 H: 0.1 - 5
52-2 F: 0.1 - 10
52-2 H: 0.1 - 5
52-3 F: 0.1 - 10
52-3 H: 0.1 - 5
52-4 F: 0.1 - 10
52-4 H: 0.1 - 5

2) Unit 52-16

52-5 F: 0.1 - 10
52-5 H: 0.1 - 5

3) Unit 52-21

52-8 F: 0.1 - 10
52-8 H: 0.1 - 5

4) Unit 8-1

8-1 F: 0.1 - 15
8-1 H: 0.1 - 5

5) Unit 16-1

16-1 F: 0.1 - 15
16-1 H: 0.1 - 2

6) Unit 2-1

2-1 F: 0.1 - 5
2-1 H: 0.1 - 2

7) Units 26-1 & 2

26-1 & 2 F: 0.1 - 15
26-1 & 2 H: 0.1 - 5

8) Unit 56-1

80 Bag Filter: 0.1 - 15
80 Bag HEPA: 0.1 - 5
100 Bag Filter: 0.1 - 20
100 Bag HEPA: 0.1 - 5
144 Bag Filter: 0.1 - 20
144 Bag HEPA: 0.1 - 5
72 Bag Filter: 0.1 - 15
72 Bag Filter: 0.1 - 5
Bag Filter: 0.1 - 20
HEPA: 0.1 - 5
Bag Filter: 0.1 - 20
HEPA: 0.1 - 5

9) Unit 56-2

80 Bag Filter: 0.1 - 15

- 80 Bag HEPA: 0.1 - 5
- 100 Bag Filter: 0.1 - 20
- 100 Bag HEPA: 0.1 - 5
- 144 Bag Filter: 0.1 - 20
- 144 Bag HEPA: 0.1 - 5
- 72 Bag Filter: 0.1 - 15
- 72 Bag Filter: 0.1 - 5
- Bag Filter: 0.1 - 20
- HEPA: 0.1 - 5
- Bag Filter: 0.1 - 20
- HEPA: 0.1 - 5
- 10) Unit 56-3
 - Baghouse: 0.1 - 15
 - HEPA: 0.1 - 5
- 11) Unit 56-4
 - Baghouse: 0.1 - 15
 - HEPA: 0.1 - 15
- 12) Unit 56-5
 - Torit: 0.1 - 20
 - 80 Bag Filter: 0.1 - 15
 - 80 Bag HEPA: 0.1 - 5
 - 100 Bag Filter: 0.1 - 20
 - 100 Bag HEPA: 0.1 - 5
 - 144 Bag Filter: 0.1 - 20
 - 144 Bag HEPA: 0.1 - 5
 - 72 Bag Filter: 0.1 - 15
 - 72 Bag Filter: 0.1 - 5
 - Bag Filter: 0.1 - 20
 - HEPA: 0.1 - 5
 - Bag Filter: 0.1 - 20
 - HEPA: 0.1 - 5
- 13) Unit 56-6
 - 80 Bag Filter: 0.1 - 15
 - 80 Bag HEPA: 0.1 - 5
 - 100 Bag Filter: 0.1 - 20
 - 100 Bag HEPA: 0.1 - 5
 - 144 Bag Filter: 0.1 - 20
 - 144 Bag HEPA: 0.1 - 5
 - 72 Bag Filter: 0.1 - 15
 - 72 Bag Filter: 0.1 - 5
 - Bag Filter: 0.1 - 20
 - HEPA: 0.1 - 5
 - Bag Filter: 0.1 - 20
 - HEPA: 0.1 - 5
- 14) Unit 56-7
 - Baghouse: 0.1 - 20
 - HEPA: 0.1 - 5
- 15) Unit 35-1
 - 35-1 F: 0.1 - 15
 - 35-1 H: 0.1 - 5
- 16) Unit 27-1
 - 27-1 F: 0.1 - 15
 - 27-1 H: 0.1 - 5

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- 17) Unit 33-1
 - 33-1 F: 0.1 - 15
 - 33-1 H: 0.1 - 5
 - 18) Unit 34-1 and 34-2
 - 34-1 F: 0.1 - 15
 - 34-1 H: 0.1 - 5
 - 34-2 F: 0.1 - 15
 - 34-2 H: 0.1 - 5
 - 19) Unit 47-1
 - 47-1 F: 0.1 - 10
 - 47-1 H: 0.1 - 4
 - 20) Unit 1-1
 - HEPA 1: 0.1 - 10
 - HEPA 2: 0.1 - 10
 - HEPA 3: 0.1 - 10
 - 21) Units 15-1, 2, & 3
 - 15-1 D: 0.1 - 20
 - 15-2 D: 0.1 - 20
 - 15-3 D: 0.1 - 20
 - 22) Unit 37-1
 - 37-1 F: 0.1 - 50
 - 23) Unit 42-1
 - 42-1 F: 0.1 - 50
 - 24) Unit 39-1
 - 39-1 F: 0.1 - 15
 - 39-1 H: 0.1 - 15
 - 25) Unit 44-1
 - 44-1 F: 0.1 - 15
 - 44-1 H: 0.1 - 15
 - 26) Unit 48-1
 - 48-1 F: 0.1 - 15
 - 48-1 H: 0.1 - 15
 - 27) Unit 48-2
 - 48-2 F: 0.1 - 15
 - 48-2 H: 0.1 - 15
 - 28) Unit 48-3
 - 48-3 F: 0.1 - 15
 - 48-3 H: 0.1 - 15
 - 29) Unit 48-4
 - 48-4 F: 0.1 - 15
 - 48-4 H: 0.1 - 15
 - 30) Unit 45-1
 - 45-1 F: 0.1 - 15
 - 31) Unit 45-2
 - 45-2 F: 0.1 - 15
 - 32) Unit 25-1
 - 25-1 S: 0.1 - 15
 - 33) Unit 40-1
 - 40-1 S: 0.1 - 15
 - 34) Unit 36-1
 - 36-1 F: 0.1 - 50
 - 35) Unit 41-1
 - 41-1 F: 0.1 - 50

- 36) Unit 38-1
 - 38-1 F1: 0.1 - 100
 - 38-1 F2: 0.1 - 100
- 37) Unit 43-1
 - 43-1 F1: 0.1 - 100
 - 43-1 F2: 0.1 - 100

If the pressure drop is outside this range for more than two consecutive readings, corrective action shall be taken in accordance with the Preventive Maintenance Plan.

- b) Daily visual stack emission notations are required for the following facilities:

- 1) Stack ID 1-S-52: Units 52-1 through 52-17 and 52-19 through 52-21
- 2) Stack ID 4A-S-8
- 3) Stack ID 14-S-16
- 4) Stack ID 1-S-2
- 5) Stack ID 1-S-26
- 6) Stack ID 16-S-56: Units 56-1 through 56-6
- 7) Stack ID 4-S-35
- 8) Stack ID 1-S-27
- 9) Stack ID 6-S-33
- 10) Stack ID 4B-S-34
- 11) Stack ID 6-S-47
- 12) Stack ID V-1
- 13) Various Stack IDs associated with the Expander Operation
 - a) Unit ID 15-1: DC-1000, SBU-1000, BU-1000, R-1000, T-1000, R1002, and R-1003
 - b) Unit ID 15-2: DC-2000, SBU-2000, BU-2000, R-2000, and T-2000
 - c) Unit ID 15-3: DC-3000, SBU-3000, BU-3000, R-3000, and T-3000(Shared by all three units): R-1001, R-1004, and R-1005
- 14) Stack ID 20-S-37
- 15) Stack ID 20-S-42
- 16) Stack ID 20-S-39
- 17) Stack ID 20-S-44
- 18) Stack ID 13-S-48
- 19) Stack ID 14-S-45
- 20) Stack ID 17-S-25
- 21) Stack ID 17-S-40
- 22) Stack ID 20-S-36
- 23) Stack ID 20-S-41
- 24) Stack ID 20-S-38
- 25) Stack ID 20-S-43

- c) Quarterly reports shall be submitted to HDEM and OAM, Compliance Section. These reports shall include the pressure drop readings, cleaning cycle frequency, and visual stack emission notations.

These monitoring conditions are necessary because the particulate matter control equipment associated with each facility must be operated properly to ensure compliance with 326 IAC 6-1-10.1 (Lake County PM10 emission requirements) and 326 IAC 2-8 (FESOP).

3. An initial and periodic compliance stack test is also required for (Stack ID 14-S-15; Units 15-1 and 15-2).

This monitoring condition is necessary to ensure compliance with 326 IAC 6-1-10.1 (Lake County PM10 and Pb emission requirements) and 326 IAC 2-8 (FESOP).

4. The two (2) Boilers (No. 1 & 2) shall be required to record and maintain the monthly fuel usage. These shall be submitted upon request by HDEM or IDEM.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application GSD-08.

This source has accepted federally enforceable air toxic emission limits of less than 9 tons per year for any single HAP and less than 24 tons per year for any combination of HAPs.

Conclusion

The operation of this **Inorganic Chemicals and Pigments Manufacturing Plant** will be subject to the conditions of the attached proposed **FESOP No. F089-5200-00219**.

Table 3

Stack/Vent ID:	1-S-52 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 160°F	Flow: 25,813 ACFM
Emission Unit:	52-1	52-2	52-3	52-4
Date of Construction:	1930	1930	1930	1980
Alternative Scenario:	Propane Combustion	Propane Combustion	Propane Combustion	Propane Combustion
Pollution Control Equipment:	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)
General Description of Requirement:	Requirement for stack 1-S-52:	PM10 & PM emission Limits	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-52:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-52:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 4

Stack/Vent ID:	1-S-52 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 160°F	Flow: 25,813 ACFM
Emission Unit:	52-5	52-6	52-7	52-8
Date of Construction:	1971	1930	1930	1955
Alternative Scenario:	Propane Combustion	Propane Combustion	Propane Combustion	Propane Combustion
Pollution Control Equipment:	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)
General Description of Requirement:	Requirement for stack 1-S-52:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-52:	PM & PM10: 0.022 gr/dscf; 1,000 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-52:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 5

Stack/Vent ID:	1-S-52 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 160°F	Flow: 25,813 ACFM
Emission Unit:	52-9	52-10	52-11	52-12
Date of Construction:	1957	1972	1930	1930
Alternative Scenario:	Propane Combustion	Propane Combustion	None	None
Pollution Control Equipment:	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)
General Description of Requirement:	Requirement for stack 1-S-52:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-52:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-52:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 6

Stack/Vent ID:	1-S-52 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 160°F	Flow: 25,813 ACFM
Emission Unit:	52-13	52-14	52-15	52-16
Date of Construction:	1957	1983	1960	1983
Alternative Scenario:	None	None	None	None
Pollution Control Equipment:	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouse & HEPA (52-5 F & H)
General Description of Requirement:	Requirement for stack 1-S-52:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-52:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-52:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 7

Stack/Vent ID:	1-S-52 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 160°F	Flow: 25,813 ACFM
Emission Unit:	52-17	52-21	52-19	52-20
Date of Construction:	November, 1989	2002	September, 1995	1960
Alternative Scenario:	None	Propane Combustion	None	None
Pollution Control Equipment:	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouse & HEPA (52-8 F & H) followed by Main Control System	Baghouses & HEPAs (52-1 thru 4 F & H)	Baghouses & HEPAs (52-1 thru 4 F & H)
General Description of Requirement:	Requirement for stack 1-S-52:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-52:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-52:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 8

Stack/Vent ID:	4A-S-8 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 60 ft	Dia: 1.25 ft	Temp: 167°F	Flow: 3045 ACFM
Emission Unit:	8-1			
Date of Construction:	1958			
Alternative Scenario:	Propane Combustion			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	PM & PM10 emission Limit	Pb emission limit		
Numerical Emission Limit:	PM & PM10: 0.022 gr/dscf; 0.250 lbs/hr	Pb: 0.053 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)		
Compliance Demonstration:	Monitoring of Operational Parameters	Compliance Testing for Pb emissions		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:		Lead (Pb)		
Testing Method/Analysis:		In accordance with 326 IAC 3-2.1		
Testing Frequency/Schedule:		Every 5 years		
Submittal of Test Results:		w/in 45 days of the test		
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations	
Monitoring Method:	Recording and Reporting		Visual Notation	
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)	
Monitoring Frequency:	Daily		Daily	
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"	
Recording Frequency:	Daily		Daily	
Submittal Schedule of Reports:	Quarterly reporting		Quarterly reporting	
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings		Stack Notations	
Reporting Frequency/Submittal:	Quarterly		Quarterly	
Additional Comments:				

Table 9

Stack/Vent ID:	14-S-16 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 60 ft	Dia: 1.25 ft	Temp: 151°F	Flow: 3484 ACFM
Emission Unit:	16-1			
Date of Construction:	1972			
Alternative Scenario:	Propane Combustion			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	PM & PM10 emission Limit	Pb emission limit		
Numerical Emission Limit:	PM & PM10: 0.022 gr/dscf; 0.250 lbs/hr	Pb: 0.053 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)		
Compliance Demonstration:	Monitoring of Operational Parameters	Compliance Testing for Pb emissions		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:		Lead (Pb)		
Testing Method/Analysis:		In accordance with 326 IAC 3-2.1		
Testing Frequency/Schedule:		Every 5 years		
Submittal of Test Results:		w/in 45 days of the test		
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations	
Monitoring Method:	Recording and Reporting		Visual Notation	
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)	
Monitoring Frequency:	Daily		Daily	
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"	
Recording Frequency:	Daily		Daily	
Submittal Schedule of Reports:	Quarterly reporting		Quarterly reporting	
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings		Stack Notations	
Reporting Frequency/Submittal:	Quarterly		Quarterly	
Additional Comments:				

Table 10

Stack/Vent ID:	1-S-2 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 60 ft	Dia: 1.25 ft	Temp: 198°F	Flow: 3691 ACFM
Emission Unit:	2-1			
Date of Construction:	1974			
Alternative Scenario:	Propane Combustion			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	PM & PM10 emission Limit	Pb emission limit		
Numerical Emission Limit:	PM & PM10: 0.022 gr/dscf; 0.250 lbs/hr	Pb: 0.053 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)		
Compliance Demonstration:	Monitoring of Operational Parameters	Compliance Testing for Pb emissions		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:		Lead (Pb)		
Testing Method/Analysis:		In accordance with 326 IAC 3-2.1		
Testing Frequency/Schedule:		Every 5 years		
Submittal of Test Results:		w/in 45 days of the test		
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations	
Monitoring Method:	Recording and Reporting		Visual Notation	
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)	
Monitoring Frequency:	Daily		Daily	
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"	
Recording Frequency:	Daily		Daily	
Submittal Schedule of Reports:	Quarterly reporting		Quarterly reporting	
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings		Stack Notations	
Reporting Frequency/Submittal:	Quarterly		Quarterly	
Additional Comments:				

Table 11

Stack/Vent ID:	1-S-26 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 60 ft	Dia: 1.25 ft	Temp: 198°F	Flow: 3484 ACFM
Emission Unit:	26-1	26-2		
Date of Construction:	1977	July, 1995		
Alternative Scenario:	Propane Combustion	Propane Combustion		
Pollution Control Equipment:	Baghouse & HEPA	Baghouse & HEPA		
General Description of Requirement:	Requirement for stack 1-S-26:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-26:	PM & PM10: 0.022 gr/dscf; 0.250 lbs/hr	Pb: 0.053 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-26:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 12

Stack/Vent ID:	16-S-56 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 253°F	Flow: 18176 ACFM
Emission Unit:	56-1	56-2	56-3	56-4
Date of Construction:	1971	April, 1994	1977	1977
Alternative Scenario:	Propane Combustion	None	None	None
Pollution Control Equipment:	(6) Baghouse & HEPA systems	(6) Baghouse & HEPA systems	(1) Baghouse & HEPA	(1) Baghouse & HEPA
General Description of Requirement:	Requirement for stack 16-S-56:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 16-S-56:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.200 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 16-S-56:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 13

Stack/Vent ID:	16-S-56 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 82 ft	Dia: 3 ft	Temp: 253°F	Flow: 18176 ACFM
Emission Unit:	56-5	56-6	56-7	
Date of Construction:	April, 1994	July, 1994	June, 1999	
Alternative Scenario:	None	Propane Combustion	None	
Pollution Control Equipment:	Torit followed by (6) Baghouse & HEPA systems	(6) Baghouse & HEPA systems	(1) Baghouse & HEPA system	
General Description of Requirement:	Requirement for stack 16-S-56:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 16-S-56:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.200 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 16-S-56:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8- 5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 14

Stack/Vent ID:	4-S-35 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 61 ft	Dia: 1.25 ft	Temp: 145°F	Flow: 3478 ACFM
Emission Unit:	35-1			
Date of Construction:	1955			
Alternative Scenario:	Propane Combustion			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	Requirement for stack 4-S-35:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 4-S-35:	PM & PM10: 0.022 gr/dscf; 0.570 lbs/hr	Pb: 0.090 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 4-S-35:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 15

Stack/Vent ID:	1-S-27 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 61 ft	Dia: 1.25 ft	Temp: 112°F	Flow: 1915 ACFM
Emission Unit:	27-1			
Date of Construction:	October, 1987			
Alternative Scenario:	None			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	Requirement for stack 1-S-27:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 1-S-27:	PM & PM10: 0.022 gr/dscf; 0.290 lbs/hr	Pb: 0.020 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 1-S-27:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 16

Stack/Vent ID:	6-S-33 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 60 ft	Dia: 2 ft	Temp: 162°F	Flow: 11843 ACFM
Emission Unit:	33-1			
Date of Construction:	1988			
Alternative Scenario:	Propane Combustion			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	Requirement for stack 6-S-33:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 6-S-33:	PM & PM10: 0.022 gr/dscf; 0.900 lbs/hr	Pb: 0.070 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 6-S-33:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 17

Stack/Vent ID:	4B-S-34 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 61 ft	Dia: 1.50 ft	Temp: 79°F	Flow: 4479 ACFM
Emission Unit:	34-1	34-2		
Date of Construction:	1955	2001		
Alternative Scenario:	None	None		
Pollution Control Equipment:	Baghouse & HEPA	Baghouse & HEPA		
General Description of Requirement:	Requirement for stack 4B-S-34:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 4B-S-34:	PM & PM10: 0.022 gr/dscf; 0.400 lbs/hr	Pb: 0.080 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	None			
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 18

Stack/Vent ID:	6-S-47 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 60 ft	Dia: 1.84 ft	Temp: 214°F	Flow: 6291 ACFM
Emission Unit:	47-1			
Date of Construction:	February, 1995			
Alternative Scenario:	Propane Combustion			
Pollution Control Equipment:	Baghouse & HEPA			
General Description of Requirement:	Requirement for stack 6-S-47:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack 6-S-47:	PM & PM10: 0.022 gr/dscf; 0.400 lbs/hr	Pb: 0.021 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 6-S-47:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 19

Stack/Vent ID:	V-1 (Oxide Division)			
Stack/Vent Dimensions:	Ht: 76 ft	Dia: 6 ft	Temp: 86°F	Flow: 55679 ACFM
Emission Unit:	1-1			
Date of Construction:	May, 1990			
Alternative Scenario:	None			
Pollution Control Equipment:	(3) HEPAs			
General Description of Requirement:	Requirement for stack V-1:	PM & PM10 emission Limit	Pb emission limit	
Numerical Emission Limit:	Limits for entire stack V-1:	PM & PM10: 0.022 gr/dscf; 1.000 lbs/hr	Pb: 0.090 lbs/hr	
Regulation/Citation:		326 IAC 6-1-10.1(d)	326 IAC 15-1-2(a)(6)	
Compliance Demonstration:		Monitoring of Operational Parameters	Compliance Testing for Pb emissions	
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack V-1:		Lead (Pb)	
Testing Method/Analysis:			In accordance with 326 IAC 3-2.1	
Testing Frequency/Schedule:			Every 5 years	
Submittal of Test Results:			w/in 45 days of the test	
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 20

Stack/Vent ID:	Various Stack IDs (Expander Division)			
Stack/Vent Dimensions:	Ht: N/A	Dia: N/A	Temp: 70°F	Flow: 1000 ACFM (Per Ball Mill)
Emission Unit:	15-1	15-2	15-3	
Date of Construction:	To be determined	To be determined	To be determined	
Alternative Scenario:	None	None	None	
Pollution Control Equipment:	Dust Collectors	Dust Collectors	Dust Collectors	
General Description of Requirement:	Requirement for stack 14-S-15:	PM &PM10 emission Limit		
Numerical Emission Limit:	Limits for entire stack 14-S-15:	PM &PM10: 0.022 gr/dscf; 0.320 lbs/hr		
Regulation/Citation:		326 IAC 6-1-10.1(d)		
Compliance Demonstration:		Compliance Testing and Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for the entire stack 14-S-15:	PM10		
Testing Method/Analysis:		In accordance with 326 IAC 3-2.1		
Testing Frequency/Schedule:		Every 5 years		
Submittal of Test Results:		w/in 45 days of the test		
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 21

Stack/Vent ID:	18-S-49 (Halox Division)	18-S-24 (Halox Division)		
Stack/Vent Dimensions:	Ht: 25 ft (Each Stack)	Dia: 1.25 ft	Temp: 350°F	Flow: 2300 ACFM
Emission Unit:	49-1	24-1		
Date of Construction:	1990	1978		
Alternative Scenario:	None	None		
Pollution Control Equipment:	None	None		
General Description of Requirement:	PM &PM10 emission Limit	PM &PM10 emission Limit		
Numerical Emission Limit:	PM &PM10: 0.003 lbs/MMBtu; 0.025 lbs/hr	PM &PM10: 0.003 lbs/MMBtu; 0.025 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(h)	326 IAC 6-1-10.1(h)		
Compliance Demonstration:	Compliance Monitoring of Operational Parameters	Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	None	None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:	Fuel usage record	Fuel usage record		
Monitoring Method:	Recordkeeping	Recordkeeping		
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)	326 IAC 2-8-5(a)(1)		
Monitoring Frequency:	Monthly	Monthly		
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Fuel usage	Fuel usage		
Recording Frequency:	Monthly	Monthly		
Submittal Schedule of Reports:	As requested	As requested		
REPORTING REQUIREMENTS				
Information in Report:	None	None		
Reporting Frequency/Submittal:				
Additional Comments:				

Table 22

Stack/Vent ID:	20-S-37 (Halox Division)	20-S-42 (Halox Division)		
Stack/Vent Dimensions:	Ht: 38 ft (Each Stack)	Dia: 0.5 ft	Temp: 70°F	Flow: 525 ACFM
Emission Unit:	37-1	42-1		
Date of Construction:	March, 1982	March, 1982		
Alternative Scenario:	None	None		
Pollution Control Equipment:	(2) Baghouses	(2) Baghouses		
General Description of Requirement:	PM &PM10 emission Limit	PM &PM10 emission Limit		
Numerical Emission Limit:	PM &PM10: 0.022 gr/dscf; 0.200 lbs/hr	PM &PM10: 0.022 gr/dscf; 0.200 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 6-1-10.1(d)		
Compliance Demonstration:	Compliance Monitoring of Operational Parameters	Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	None	None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment	Inlet/outlet differential static Pressure on control equipment	For both Stacks:	Visual Stack Notations
Monitoring Method:	Recording and Reporting	Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)	326 IAC 2-8-5(a)(1)		326 IAC 2-8- 5(a)(1)
Monitoring Frequency:	Daily	Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:	Daily	Daily		Daily
Submittal Schedule of Reports:	Quarterly reporting	Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings	Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:	Quarterly	Quarterly		Quarterly
Additional Comments:				

Table 23

Stack/Vent ID:	20-S-39 (Halox Division)	20-S-44 (Halox Division)		
Stack/Vent Dimensions:	Ht: 48 ft (20-S-39) Ht: 43 ft (20-S-44)	Dia: 1.25 ft (Each Stack)	Temp: 70°F (Each Stack)	Flow: 3000 ACFM (20-S-39) Flow: 1500 ACFM (20-S-44)
Emission Unit:	39-1	44-1		
Date of Construction:	March, 1982	March, 1982		
Alternative Scenario:	None	None		
Pollution Control Equipment:	Primary & Secondary Baghouse followed by HEPA	Primary & Secondary Baghouse followed by HEPA		
General Description of Requirement:	PM &PM10 emission Limit	PM &PM10 emission Limit		
Numerical Emission Limit:	PM &PM10: 0.022 gr/dscf; 0.496 lbs/hr	PM &PM10: 0.022 gr/dscf; 0.496 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 6-1-10.1(d)		
Compliance Demonstration:	Compliance Monitoring of Operational Parameters	Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	None	None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment	Inlet/outlet differential static Pressure on control equipment	For both Stacks:	Visual Stack Notations
Monitoring Method:	Recording and Reporting	Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)	326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:	Daily	Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:	Daily	Daily		Daily
Submittal Schedule of Reports:	Quarterly reporting	Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings	Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:	Quarterly	Quarterly		Quarterly
Additional Comments:				

Table 24

Stack/Vent ID:	13-S-48 (Halox Division)			
Stack/Vent Dimensions:	Ht: 50 ft	Dia: 2 ft	Temp: 70°F	Flow: 10000 ACFM
Emission Unit:	48-1	48-2	48-3	48-4
Date of Construction:	November, 1994	November, 1994	August, 1997	May, 2000
Alternative Scenario:	None	None	None	None
Pollution Control Equipment:	Cartridge Filter & HEPA	Cartridge Filter & HEPA	Baghouse & South Side HEPA	Rust Inhibitor Baghouse & South Side HEPA
General Description of Requirement:	Requirement for stack 13-S-48:	PM & PM10 emission Limit		
Numerical Emission Limit:	Limits for entire stack 13-S-48:	PM & PM10: 0.022 gr/dscf; 0.471 lbs/hr		
Regulation/Citation:		326 IAC 6-1-10.1(d)		
Compliance Demonstration:		Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:		None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 25

Stack/Vent ID:	14-S-45 (Halox Division)			
Stack/Vent Dimensions:	Ht: 30 ft	Dia: 1.25 ft	Temp: 70°F	Flow: 2500 ACFM
Emission Unit:	45-1	45-2		
Date of Construction:	June, 1989	June, 1989		
Alternative Scenario:	None	None		
Pollution Control Equipment:	Baghouse	(Same Unit as 45-1)		
General Description of Requirement:	Requirement for stack 14-S-45:	PM & PM10 emission Limit		
Numerical Emission Limit:	Limits for entire stack 14-S-45:	PM & PM10: 0.022 gr/dscf; 0.471 lbs/hr		
Regulation/Citation:		326 IAC 6-1-10.1(d)		
Compliance Demonstration:		Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:		None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:		Inlet/outlet differential static Pressure on control equipment		Visual Stack Notations
Monitoring Method:		Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:		326 IAC 2-8-5(a)(1)		326 IAC 2-8-5(a)(1)
Monitoring Frequency:		Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:		Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:		Daily		Daily
Submittal Schedule of Reports:		Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:		Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:		Quarterly		Quarterly
Additional Comments:				

Table 26

Stack/Vent ID:	17-S-25 (Halox Division)	17-S-40 (Halox Division)		
Stack/Vent Dimensions:	Ht: 70 ft (Each Stack)	Dia: 2 ft (Each Stack)	Temp: 117°F (Each Stack)	Flow: 9044 ACFM (Each Stack)
Emission Unit:	25-1	40-1		
Date of Construction:	December, 1992	July, 1990		
Alternative Scenario:	None	None		
Pollution Control Equipment:	Scrubber	Scrubber		
General Description of Requirement:	PM &PM10 emission Limit	PM &PM10 emission Limit		
Numerical Emission Limit:	PM &PM10: 0.030 gr/dscf; 2.120 lbs/hr	PM &PM10: 0.030 gr/dscf; 2.120 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 6-1-10.1(d)		
Compliance Demonstration:	Periodic Compliance Testing and Monitoring of Operational Parameters	Periodic Compliance Testing and Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	for either stack 17-S-25 or 17-S-40	PM10		
Testing Method/Analysis:		In accordance with 326 IAC 3-2.1		
Testing Frequency/Schedule:		Every 5 years		
Submittal of Test Results:		w/in 45 days of the test		
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment	Inlet/outlet differential static Pressure on control equipment	for both stacks:	Visual Stack Notations
Monitoring Method:	Recording and Reporting	Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)	326 IAC 2-8-5(a)(1)		326 IAC 2-8- 5(a)(1)
Monitoring Frequency:	Daily	Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:	Daily	Daily		Daily
Submittal Schedule of Reports:	Quarterly reporting	Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings	Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:	Quarterly	Quarterly		Quarterly
Additional Comments:				

Table 27

Stack/Vent ID:	20-S-36 (Halox Division)	20-S-41 (Halox Division)		
Stack/Vent Dimensions:	Ht: 48 ft (Each Stack)	Dia: 1.33 ft (Each Stack)	Temp: 300°F (Each Stack)	Flow: 3000 ACFM (Each Stack)
Emission Unit:	36-1	41-1		
Date of Construction:	March, 1982	March, 1982		
Alternative Scenario:	Propane Combustion	Propane Combustion		
Pollution Control Equipment:	Cyclone & Baghouse	Cyclone & Baghouse		
General Description of Requirement:	PM & PM10 emission Limit	PM & PM10 emission Limit		
Numerical Emission Limit:	PM & PM10: 0.022 gr/dscf; 0.395 lbs/hr	PM & PM10: 0.022 gr/dscf; 0.450 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 6-1-10.1(d)		
Compliance Demonstration:	Compliance Monitoring of Operational Parameters	Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	None	None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment	Inlet/outlet differential static Pressure on control equipment	for both stacks:	Visual Stack Notations
Monitoring Method:	Recording and Reporting	Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)	326 IAC 2-8-5(a)(1)		326 IAC 2-8- 5(a)(1)
Monitoring Frequency:	Daily	Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:	Daily	Daily		Daily
Submittal Schedule of Reports:	Quarterly reporting	Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings	Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:	Quarterly	Quarterly		Quarterly
Additional Comments:				

Table 28

Stack/Vent ID:	20-S-38 (Halox Division)	20-S-43 (Halox Division)		
Stack/Vent Dimensions:	Ht: 48 ft (20-S-38) Ht: 38 ft (20-S-43)	Dia: 1.25 ft (20-S-38) Dia: 0.50 ft (20-S-43)	Temp: 70°F (Each Stack)	Flow: 525 ACFM (Each Stack)
Emission Unit:	38-1	43-1		
Date of Construction:	March, 1982	March, 1982		
Alternative Scenario:	None	None		
Pollution Control Equipment:	(2) Baghouses	(2) Baghouses		
General Description of Requirement:	PM &PM10 emission Limit	PM &PM10 emission Limit		
Numerical Emission Limit:	PM &PM10: 0.022 gr/dscf; 0.087 lbs/hr	PM &PM10: 0.022 gr/dscf; 0.087 lbs/hr		
Regulation/Citation:	326 IAC 6-1-10.1(d)	326 IAC 6-1-10.1(d)		
Compliance Demonstration:	Compliance Monitoring of Operational Parameters	Compliance Monitoring of Operational Parameters		
PERFORMANCE TESTING				
Parameter/Pollutant to be Tested:	None	None		
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:	Inlet/outlet differential static Pressure on control equipment	Inlet/outlet differential static Pressure on control equipment	for both stacks:	Visual Stack Notations
Monitoring Method:	Recording and Reporting	Recording and Reporting		Visual Notation
Monitoring Regulation/Citation:	326 IAC 2-8-5(a)(1)	326 IAC 2-8-5(a)(1)		326 IAC 2-8- 5(a)(1)
Monitoring Frequency:	Daily	Daily		Daily
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	Inlet/outlet differential static pressure	Inlet/outlet differential static pressure		Stack Condition as "Normal" or "Above Normal"
Recording Frequency:	Daily	Daily		Daily
Submittal Schedule of Reports:	Quarterly reporting	Quarterly reporting		Quarterly reporting
REPORTING REQUIREMENTS				
Information in Report:	Daily pressure drop readings	Daily pressure drop readings		Stack Notations
Reporting Frequency/Submittal:	Quarterly	Quarterly		Quarterly
Additional Comments:				

Hammond Department of Environmental Management
-Air Pollution Control Division-

Appendix A: Source Emissions Calculations

Plant ID: 00219

Company Name: Hammond Group, Inc. (HGI)

Address: 2308 - 165th Street, Hammond, Indiana 46320

Calculations By: Jean Ziga

NO. OF POINTS: 71

* 1995 Actuals: As per the 1995 Emission Statement submitted on 4/15/96

Debra Malone - Modified (1/13/03)

NO. OF SEGMENTS: 129

****NOTES****

EF: EMISSION FACTOR

MDR: MAXIMUM DESIGN RATE

Ts: STACK DISCHARGE TEMPERATURE

CE: CONTROL EFFICIENCY

MDC: MAXIMUM DESIGN CAPACITY

UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

** SOURCE TOTALS: HAMMOND GROUP, INC. (HGI) **										
POLLUTANT	POTENTIAL TO EMIT (PTE)						PERMIT LIMIT		ACTUAL	
	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS
	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(qr/dscf)				
PM	1,285.7797	30,858.7137	5,631.7153	0.7500	3.2850	0.0375	14.523	63.611	1775.5850	0.6810
PM10	1,285.7545	30,858.1089	5,631.6049	0.7248	3.1747	0.0355	14.523	63.611	1775.5670	0.6630
SOx	0.0310	0.7451	0.1360	0.0310	0.1360	N/A	N/A	N/A	0.0422	0.0422
NOx	5.1746	124.1895	22.6646	5.1746	22.6646	N/A	6	26	7.0405	7.0405
VOC	0.2855	6.8514	1.2504	0.2855	1.2504	N/A	N/A	N/A	0.3904	0.3904
CO	1.0742	25.7798	4.7048	1.0742	4.7048	N/A	N/A	N/A	1.4546	1.4546
LEAD	478.1690	11,476.0560	2,094.3802	0.0240	0.1049	N/A	0.853	3.736	511.1826	0.0293

* Under Natural Gas Combustion